




นักออกแบบผลิตภัณฑ์พลาสติกได้อย่างถูกต้อง จึงกล่าวได้ว่า PLASA I เป็นระบบฐานความรู้ต้นแบบสำหรับการเลือกพลาสติกที่สามารถช่วยขจัดปัญหาต่างๆ ในการเลือกพลาสติกดังกล่าวมาแล้วข้างต้น

ตารางที่ 6.1 แสดงคะแนนในการจัดลำดับความเหมาะสมของพลาสติก โดยทฤษฎี AIM

|     | ค่าการกระทำ | ค่าน้ำหนัก | คะแนน  | หมายเหตุ     |
|-----|-------------|------------|--|--------------|
| AIM | สูง         | สูง        |  | ดีที่สุด     |
|     | สูง         | ต่ำ        |  |              |
|     | ต่ำ         | สูง        |   | แย่มากที่สุด |
|     | ต่ำ         | ต่ำ        |   |              |

## 6.2 สรุปผล

ระบบฐานความรู้สำหรับการเลือกพลาสติก (PLASA I) นี้ถูกพัฒนาขึ้น เพื่อช่วยในการเลือกชนิดของพลาสติกให้เหมาะสมกับการใช้งานและถูกต้องตามหลักวิศวกรรม ในการเลือก PLASA I จะทำการเลือกจากพลาสติกที่แบ่งเป็นกลุ่มๆ ซึ่งพลาสติกในแต่ละกลุ่มมีสมบัติที่คล้ายคลึงกัน ทั้งนี้เพื่อเพิ่มความเร็วในการทำการเลือก ระบบจะถามผู้ใช้เกี่ยวกับสมบัติต่างๆ ของพลาสติกก่อน เพื่อระบบสามารถทำการเลือกพลาสติกได้ในช่วงกว้าง เช่น สมบัติด้านอุณหภูมิ หลังจากนั้นจึงจะถามคำถามที่เกี่ยวกับสมบัติพลาสติกที่เฉพาะเจาะจงตาม que ผู้ใช้ต้องการ ระบบนี้ใช้กลไกในการอนุมานแบบ AIM มาช่วยในการปรับปรุงผลที่ได้จากการเลือก โดยระบบฐานความรู้ทำให้ระบบมีความถูกต้องมากขึ้น และเป็นการเพิ่มความมั่นใจในการเลือกพลาสติกแก่ผู้ใช้ ในกรณีที่ไม่มีพลาสติกชนิดใดเลยที่ตรงกับสมบัติที่ผู้ใช้ต้องการ PLASA I มีการเตือนให้ผู้ใช้ทราบทันที และสามารถเปลี่ยนแปลงค่าได้ทันที ความรู้ที่บรรจุอยู่ในฐานความรู้ก็สามารถเพิ่มลงไปได้อย่างง่ายดาย และความรู้นั้นจะคงอยู่ตลอดไป ผู้ที่ไม่มีความรู้ด้านคอมพิวเตอร์หรือ ความรู้เกี่ยวกับพลาสติกก็สามารถใช้งานระบบนี้ได้

การที่จะทำให้ระบบใช้ประโยชน์ได้มากยิ่งขึ้นนั้นควรเพิ่มเติมชนิดพลาสติก และค่าสมบัติที่ได้จากการทดสอบอื่นๆ นอกจากนั้น ในระหว่างการให้คำปรึกษา หรือเพิ่มความรู้ในการตัดสินใจเลือกค่าสมบัติของพลาสติกที่ใกล้เคียงกัน

ประโยชน์และความสำคัญที่ได้รับจากการพัฒนาระบบฐานความรู้ต้นแบบสำหรับการเลือกพลาสติก มีดังต่อไปนี้

1. สามารถนำมาใช้เป็นแหล่งข้อมูลทางเทคนิคเบื้องต้นที่เกี่ยวกับวัสดุวิศวกรรม
2. สามารถนำมาใช้ประโยชน์ในช่วยผู้ใช้พิจารณา และศึกษาวัสดุพลาสติกที่ต้องการ
3. สามารถนำมาใช้ประโยชน์ในการช่วยผู้ใช้ตัดสินใจเลือกวัสดุพลาสติกที่เหมาะสมสำหรับผลิตภัณฑ์
4. สามารถนำความรู้ที่เกี่ยวกับการเลือกชนิดของวัสดุพลาสติกตามความประสงค์ของการนำพลาสติกไปใช้เงื่อนไขทางฟิสิกส์ และเคมี โดยนำมาเก็บรวบรวมไว้ในคอมพิวเตอร์ ซึ่งง่ายต่อการเพิ่มเติมความรู้ใหม่ๆ และปรับปรุงแก้ไข และความรู้ นั้นจะคงอยู่ต่อไป

## รายการอ้างอิง

### ภาษาไทย

ก่อเกียรติ เก่งสกุล “ปัญญาประดิษฐ์ และระบบผู้เชี่ยวชาญ” ภาควิชาคอมพิวเตอร์

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## ภาคผนวก ก

### ระบบฐานกฎในระบบฐานความรู้ต้นแบบสำหรับการเลือกพลาสติก

กลุ่มของระบบฐานกฎในระบบฐานความรู้ต้นแบบสำหรับการเลือกพลาสติกแสดงดังต่อไปนี้

RULE : Rule AskFDA\_Required\_\_1

If ProductObject.FDA is precisely equal to "Yes"

Then AskFDA

is confirmed.

And Create Object PriorityFDA |Priority|

RULE : Rule AskFDA\_Required\_\_1\_\_1

If ProductObject.FDA is precisely equal to "No"

Then AskFDA

is confirmed.

RULE : Rule AskUser

If Structured\_Polymer is assigned to Structured\_Polymer

And Create Object <|PlasticsStructured|> |First\_Media|

And Create Object <|PlasticsStructured|> |Second\_Media|

And Select\_Session is assigned to Select\_Session

And Create Object <|First\_Media|> |PlasticsRank|

And RankProperty is assigned to RankProperty

And LENGTH(<|First\_Media|>) is assigned to N

And N is assigned to |PlasticsRank|.TotalPlastics

And ObjectScore is assigned to ObjectScore

And TotalScore is assigned to TotalScore  
 And Create Object <|First\_Media> |PrePlastics|  
 And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
 @STRING="@RETURN=|PrePlastics|.Name";)  
 Then Begin  
   is confirmed.  
   And Execute "Inform.win6"(@TYPE=FRM;@WAIT=TRUE;)  
   And Execute "ControlSession"(@WAIT=TRUE;@ATOMID=Begin;  
 @STRING="@STOP,@UNSUGGEST";)

RULE : Rule AskWeatheringRequired

If ProductObject.OutdoorWeather is precisely equal to "Excellent"

Then AskOutdoorWeathering

  is confirmed.

  And Create Object PriorityOutdoor |Priority|

RULE : Rule AskWeatheringRequired\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Good"

Then AskOutdoorWeathering

  is confirmed.

  And Create Object PriorityOutdoor |Priority|

RULE : Rule AskWeatheringRequired\_\_1\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Fair"

Then AskOutdoorWeathering

  is confirmed.

  And Create Object PriorityOutdoor |Priority|

RULE : Rule AskWeatheringRequired\_\_1\_\_1\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Poor"

Then AskOutdoorWeathering

is confirmed.

And Create Object PriorityOutdoor |Priority|

RULE : Rule AskWeatheringRequired\_\_1\_\_1\_\_1\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Not\_necessary"

Then AskOutdoorWeathering

is confirmed.

RULE : Rule Cal1

If there is evidence of ChangeClass

And there is evidence of CopyWeight

Then ObjectScore

is confirmed.

And Create Object <|PlasticsCal|> |PlasticsResult|

And Delete Object <|PlasticsCal|> |PlasticsCal|

And Reset X

And Reset ChangeClass

And Reset CalScore

And Reset ObjectScore

RULE : Rule CalTotalScore

If SUM(<|PlasticsResult|>.ObjectScore) is assigned to Z

And Z is assigned to <|PlasticsResult|>.SumAll

Then TotalScore

is confirmed.



And  $((\langle\text{PlasticsResult}\rangle.\text{ObjectScore}) * 10) / (\langle\text{PlasticsResult}\rangle.\text{SumAll})$  is assigned to  $\langle\text{PlasticsResult}\rangle.\text{TotalScore}$

RULE : Rule CheckOrderPropertyChemical

If PriorityChemical is a member of  $\langle\text{Priority\_Group}\rangle$

Then SelectPlastics

is confirmed.

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID= $\langle\text{First\_Media}\rangle$ .  
ChemicalResistance;@STRING="@SUPERSET,@TEST=@V(|ProductChemical|.ChemicalR  
esistance),@RETURN=PlasticsChemicalResistance";)

And Delete Object  $\langle\text{First\_Media}\rangle$  |First\_Media|

And Create Object  $\langle\text{PlasticsChemicalResistance}\rangle$  |First\_Media|

And CheckPlasticsChemicalMember is assigned to CheckPlasticsChemicalMember

And Delete Object  $\langle\text{Second\_Media}\rangle$  |Second\_Media|

And Delete Object  $\langle\text{Priority\_Group}\rangle$  |Priority\_Group|

And Reset Clear\_Value

And Create Object  $\langle\text{PlasticsChemicalResistance}\rangle$  |Second\_Media|

And Delete Object  $\langle\text{Third\_Media}\rangle$  |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset  $\langle\text{Information}\rangle$ .ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyDensity

If PriorityDensity is a member of  $\langle\text{Priority\_Group}\rangle$

Then SelectPlastics

is confirmed.

And Density is assigned to Density

And CheckPlasticsDensityMember is assigned to CheckPlasticsDensityMember

And Create Object <|First\_Media|> |PlasticsDensity|

And Delete Object <|Second\_Media|> |Second\_Media|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsDensity|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyDielectricStrength

If PriorityDielectricStrength is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And DielectricStrength is assigned to DielectricStrength

And CheckPlasticsDielectricMember is assigned to CheckPlasticsDielectricMember

And Create Object <|First\_Media|> |PlasticsDielectricStrength|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsDielectricStrength|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyElongation

If PriorityElongation is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And Elongation is assigned to Elongation

And CheckPlasticsElongationMember is assigned to CheckPlasticsElongationMember

And Create Object <|First\_Media|> |PlasticsElongation|

And Delete Object <|Second\_Media|> |Second\_Media|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsElongation|> |Second\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyFDA

If PriorityFDA is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And FDA is assigned to FDA

And CheckPlasticsFDAMember is assigned to CheckPlasticsFDAMember

And Create Object <|First\_Media|> |PlasticsFDA|

And Delete Object <|Second\_Media|> |Second\_Media|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsFDA|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyImpact

If PriorityImpact is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And ImpactStrength is assigned to ImpactStrength

And CheckPlasticsImpactMember is assigned to CheckPlasticsImpactMember

And Create Object <|First\_Media|> |PlasticsImpactStrength|

And Create Object <|PlasticsImpactStrength|> |First\_Media|

And Delete Object <|Second\_Media|> |Second\_Media|

And Reset Clear\_Value

And Create Object <|PlasticsImpactStrength|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyOutdoor

If PriorityOutdoor is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And OutdoorWeathering is assigned to OutdoorWeathering

And CheckPlasticsOutdoorWeatherMember is assigned to

CheckPlasticsOutdoorWeatherMember

And Create Object <|First\_Media|> |PlasticsOutdoorWeather|

And Delete Object <|Second\_Media|> |Second\_Media|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsOutdoorWeather|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckOrderPropertyTensileStrength

If PriorityTensileStrength is a member of <|Priority\_Group|>

Then SelectPlastics

is confirmed.

And TensileStrength is assigned to TensileStrength

And CheckPlasticsTensileMember is assigned to CheckPlasticsTensileMember

And Create Object <|First\_Media|> |PlasticsTensileStrength|

And Delete Object <|Priority\_Group|> |Priority\_Group|

And Reset Clear\_Value

And Create Object <|PlasticsTensileStrength|> |Second\_Media|

And Delete Object <|Third\_Media|> |Third\_Media|

And Reset T

And Reset |Media|.TotalPlastics

And Reset <Information>.ValueString

And Reset TypeOfProperty.ValueString

And Reset |Third\_Media|.ValueString

RULE : Rule CheckSelectDielectric

If <|Second\_Media|>.DielectricStrength is greater than or equal to 200

And <|Second\_Media|>.DielectricStrength is less than 400

Then CheckDielectricSelectPlastics

is confirmed.

And "Medium" is assigned to InformationB.ValueString

RULE : Rule CheckSelectDielectricLow

If <|Second\_Media|>.DielectricStrength is less than 200

Then CheckDielectricSelectPlastics

is confirmed.

And "Low" is assigned to InformationC.ValueString

RULE : Rule CheckSelectDielectric\_\_1

If <|Second\_Media|>.DielectricStrength is greater than or equal to 400

And <|Second\_Media|>.DielectricStrength is less than 500

Then CheckDielectricSelectPlastics

is confirmed.

And "High" is assigned to InformationD.ValueString

RULE : Rule CheckSelectDielectric\_\_1\_\_1

If <|Second\_Media|>.DielectricStrength is greater than or equal to 500

Then CheckDielectricSelectPlastics

is confirmed.

And "VeryHigh" is assigned to InformationA.ValueString

RULE : Rule ChemicalCheck

If ProductObject.ChemicalRequired is precisely equal to "Yes"

Then AskChemical

is confirmed.

And RuleChemical is assigned to RuleChemical

RULE : Rule ChemicalRankKnown

If <|PlasticsRank|>.ChemicalResistance is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsKnown|

And RankChemicalKnown is assigned to RankChemicalKnown

RULE : Rule ChemicalRankNotknown

If <|PlasticsRank|>.ChemicalResistance is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankChemicalNotknown is assigned to RankChemicalNotknown

RULE : Rule ChemicalResistanceChlorinated

If Execute

"TestMultiValue"(@WAIT=TRUE;@ATOMID=|ProductChemical|.ChemicalResistance;@STRING="@SUPERSET,@TEST=Chlorinated\_Solvent,@RETURN=ProductChemical.Value";)

And |ProductChemical| is precisely equal to TRUE

Then ChemicalResistance

is confirmed.

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.

ChemicalResistance;@STRING="@SUPERSET,@TEST=Chlorinated\_Solvent,@RETURN=PlasticsChemicalResistanceChlorinated";)

And Delete Object <|First\_Media|> |First\_Media|

And Create Object <|PlasticsChemicalResistanceChlorinated|> |First\_Media|

RULE : Rule ChemicalValue

If Create Object PriorityChemical |Priority|

And Execute "Inform.win11"(@TYPE=FRM;@WAIT=TRUE;)

Then RuleChemical

is confirmed.

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|ProductChemical|>.

ChemicalResistance;@STRING="@ADD,@RETURN=|ProductChemical|.

ChemicalNotUnknown,@VALUES";)

And Execute

"ComputeMultiValue"(@WAIT=TRUE;@ATOMID=|ProductChemical|.ChemicalNotUnknown;@STRING="@VALUE=UNKNOWN,NOTKNOWN,@RETURN=|ProductChemical|.ChemicalResistance,@DIFFERENCE";)

RULE : Rule ClassRankChange

If MIN(<|PlasticsRank|>.DensityRank) is assigned to X



And <|PlasticsRank|>.DensityRank is precisely equal to X.Value

Then ChangeClass

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsCal|

And Delete Object <|PlasticsRank|> |PlasticsRank|

And <|PlasticsCal|>.DensityRank is assigned to P1

And P1 is assigned to PriorityDensity.Perform

And <|PlasticsCal|>.TensileStrengthRank is assigned to P2

And P2 is assigned to PriorityTensileStrength.Perform

And <|PlasticsCal|>.ImpactRank is assigned to P3

And P3 is assigned to PriorityImpact.Perform

And <|PlasticsCal|>.ElongationRank is assigned to P4

And P4 is assigned to PriorityElongation.Perform

And <|PlasticsCal|>.DielectricRank is assigned to P5

And P5 is assigned to PriorityDielectricStrength.Perform

And <|PlasticsCal|>.FDARank is assigned to P6

And P6 is assigned to PriorityFDA.Perform

And <|PlasticsCal|>.OutdoorRank is assigned to P7

And P7 is assigned to PriorityOutdoor.Perform

And <|PlasticsCal|>.ChemicalRank is assigned to P8

And P8 is assigned to PriorityChemical.Perform

And CalScore is assigned to CalScore

RULE : Rule ClearAllvalue

If Reset |Media|.TotalPlastics

And Reset T

And Reset Y

And Reset Check\_Priority

And Reset SelectPlastics

And Reset Select\_Session

Then Clear\_Value

is confirmed.

RULE : Rule CopyScore

If Create Object <|PlasticsCal|> |PlasticsResult|

And Delete Object <|PlasticsCal|> |PlasticsCal|

And Execute "CopyFrame"(@WAIT=TRUE;@ATOMID=|PropertyAll|,|PropertySub|;)

And Execute "ResetFrame"(@WAIT=TRUE;@ATOMID=|PropertyAll|;)

And Execute "CopyFrame"(@WAIT=TRUE;@ATOMID=|PropertySub|,|PropertyAll|;)

Then CopyWeight

is confirmed.

And Reset X

And Reset ChangeClass

And Reset CalScore

And Reset ObjectScore

RULE : Rule Crystallike

If there is evidence of High\_Rigidity

Then Structure

is confirmed.

And High\_Rigidity is assigned to ProductObject.HighRigidity

RULE : Rule Crystalline

If there is evidence of High\_Rigidity

And <|Plastics|>.TemperatureGlassMax is precisely equal to (0-99999)

And <|Plastics|>.TemperatureGlassMin is precisely equal to 99999

And ProductObject.TemperatureMax is less than <|Plastics|>.TemperatureMelting

Then Structured\_Polymer

is confirmed.

And Create Object <|Plastics|> |PlasticsCrystalline|

RULE : Rule DeleteElement

If Delete Object <|First\_Media|> |First\_Media|

Then ResetFirstMedia

is confirmed.

RULE : Rule DeleteSubElement

If Delete Object <|Second\_Media|> |Second\_Media|

Then ResetSecondMedia

is confirmed.

RULE : Rule DensityHeavy

If ProductObject.Dens is precisely equal to "Heavy"

And <|First\_Media|>.Density is less than 62.37

Then Density

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DensityHeavy\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.DensNew

And ProductObject.DensNew is precisely equal to "Heavy"

And <|First\_Media|>.Density is less than 62.37

Then DensityChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DensityKnown

If Execute "RankList"(@WAIT=TRUE;@ATOMID=<|PlasticsKnown|>;  
@STRING="@RANKBY=Density,@RANKSET=DensityRank,@INCREASING";)

Then RankDensityKnown

is confirmed.

RULE : Rule DensityLight

If ProductObject.Dens is precisely equal to "Light"

And <|First\_Media|>.Density is greater than or equal to 62.37

Then Density

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DensityLight\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.DensNew

And ProductObject.DensNew is precisely equal to "Light"

And <|First\_Media|>.Density is greater than or equal to 62.37

Then DensityChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DensityNotknown

If 0 is assigned to <|PlasticsNotKnown|>.DensityRank

Then RankDensityNotknown

is confirmed.

RULE : Rule DensityRankKnown

If <|PlasticsRank|.Density is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsKnown|

And RankDensityKnown is assigned to RankDensityKnown

RULE : Rule DensityRankNotknown

If <|PlasticsRank|.Density is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankDensityNotknown is assigned to RankDensityNotknown

RULE : Rule DetailResin

If |Product|.Detail is precisely equal to KNOWN

Then DESCRIPTION

is confirmed.

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>.

Name;@STRING="@ALL=ALL,@TEST=@V(Product.Detail),@RETURN=

DetailPlastics,@COMP=STRING";)

And <|DetailPlastics|.DetailWin is assigned to |DetailPlastics|.DetailWin

And Execute "@V(DetailPlastics.DetailWin)"(@TYPE=FRM;@WAIT=TRUE;)

And Reset RESETSHOW

RULE : Rule DetailResin\_\_1

If |ProductShow|.Detail is precisely equal to KNOWN

Then DESCRIPTION2

is confirmed.

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>.

Name;@STRING="@ALL=ALL,@TEST=@V(ProductShow.Detail),@RETURN=DetailPlastics,@COMP=STRING";)

And <|DetailPlastics|.DetailWin is assigned to |DetailPlastics|.DetailWin

And Execute "@V(DetailPlastics.DetailWin)"(@TYPE=FRM;@WAIT=TRUE;)

And Reset RESETSHOW

**RULE : Rule DielectricKnown**

If Execute "RankList"(@WAIT=TRUE;@ATOMID=<|PlasticsKnown|>;

@STRING="@RANKBY=DielectricStrength,@RANKSET=DielectricRank,@INCREASING";)

Then RankDielectricKnown

is confirmed.

**RULE.: Rule DielectricNotknown**

If 0 is assigned to <|PlasticsNotKnown|.DielectricRank

Then RankDielectricNotknown

is confirmed.

**RULE : Rule DielectricQ**

If there is evidence of DielectricStrengthNeed

And Create Object PriorityDielectricStrength |Priority|

Then DielectricQuestion

is confirmed.

And ProductObject.Dielectric is assigned to |UserRequirement|.Dielectric

**RULE : Rule DielectricRank**

If 0 is assigned to <|PlasticsRank|.DielectricRank

Then RankDielectric

is confirmed.

RULE : Rule DielectricRankKnown

If <|PlasticsRank|.DielectricStrength is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank| |PlasticsKnown|

And RankDielectricKnown is assigned to RankDielectricKnown

RULE : Rule DielectricRankNotknown

If <|PlasticsRank|.DielectricStrength is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank| |PlasticsNotKnown|

And RankDielectricNotknown is assigned to RankDielectricNotknown

RULE : Rule DielectricStrengthHigh

If there is evidence of DielectricStrengthNeed

And ProductObject.Dielectric is precisely equal to "High"

And DielectricStrengthSub is assigned to DielectricStrengthSub

Then DielectricStrength

is confirmed.

RULE : Rule DielectricStrengthHigh\_\_1

If <|First\_Media|.DielectricStrength is less than 400

Then DielectricStrengthSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthHigh\_\_2

If <|First\_Media|>.DielectricStrength is greater than or equal to 500

Then DielectricStrengthSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthHigh\_\_3

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.DielectricNew

And ProductObject.DielectricNew is precisely equal to "High"

And DielectricStrengthSub is assigned to DielectricStrengthSub

Then DielectricChange

is confirmed.

RULE : Rule DielectricStrengthLow

If there is evidence of DielectricStrengthNeed

And ProductObject.Dielectric is precisely equal to "Low"

And <|First\_Media|>.DielectricStrength is greater than 200

Then DielectricStrength

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthLow\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.DielectricNew



And ProductObject.DielectricNew is precisely equal to "Low"

And <|First\_Media|>.DielectricStrength is greater than 200

Then DielectricChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthMedium

If there is evidence of DielectricStrengthNeed

And ProductObject.Dielectric is precisely equal to "Medium"

And DielectricStrengthMedSub is assigned to DielectricStrengthMedSub

Then DielectricStrength

is confirmed.

RULE : Rule DielectricStrengthMedium\_\_1

If <|First\_Media|>.DielectricStrength is less than 200

Then DielectricStrengthMedSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthMedium\_\_2

If <|First\_Media|>.DielectricStrength is greater than or equal to 400

Then DielectricStrengthMedSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthMedium\_\_3

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.DielectricNew

And ProductObject.DielectricNew is precisely equal to "Medium"  
 And DielectricStrengthMedSub is assigned to DielectricStrengthMedSub  
 Then DielectricChange  
 is confirmed.

RULE : Rule DielectricStrengthVeryHigh

If there is evidence of DielectricStrengthNeed  
 And ProductObject.Dielectric is precisely equal to "VeryHigh"  
 And <|First\_Media|>.DielectricStrength is less than 500  
 Then DielectricStrength  
 is confirmed.  
 And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule DielectricStrengthVeryHigh\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue  
 And ProductObject.NewValue is assigned to ProductObject.DielectricNew  
 And ProductObject.DielectricNew is precisely equal to "VeryHigh"  
 And <|First\_Media|>.DielectricStrength is less than 500  
 Then DielectricChange  
 is confirmed.  
 And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule Elastomer

If there is evidence of Stretch\_Rapidly\_under\_Tension  
 And there is evidence of Recover\_its\_Original\_Dimension  
 And <|Plastics|>.TemperatureMelting is precisely equal to (0-99999)  
 And <|Plastics|>.TemperatureGlassMin is not equal to 99999  
 And ProductObject.TemperatureMin is greater than <|Plastics|>.TemperatureGlassMax

Then Structured\_Polymer

is confirmed.

And Create Object <|Plastics|> |PlasticsElastomer|

RULE : Rule Elastomerlike

If there is evidence of Stretch\_Rapidly\_under\_Tension

And there is evidence of Recover\_its\_Original\_Dimension

Then Structure

is confirmed.

And Stretch\_Rapidly\_under\_Tension is assigned to ProductObject.Stretch

And Recover\_its\_Original\_Dimension is assigned to ProductObject.Original

RULE : Rule ElongationKnown

If Execute "RankList"(@WAIT=TRUE;@ATOMID=<|PlasticsKnown|>;

@STRING="@RANKBY=Elongation,@RANKSET=ElongationRank,@INCREASING";)

Then RankElongationKnown

is confirmed.

RULE : Rule ElongationNotknown

If 0 is assigned to <|PlasticsNotKnown|>.ElongationRank

Then RankElongationNotknown

is confirmed.

RULE : Rule ElongationPercent

If ProductObject.Elongation-<|First\_Media|>.Elongation is greater than 0

Then Elongation

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ElongationPercent\_\_1

If ProductObject.ElongationNew is assigned to ProductObject.ElongationNew  
 And ProductObject.ElongationNew-<|First\_Media|.Elongation is greater than 0  
 Then ElongationChange  
 is confirmed.  
 And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ElongationPercent\_\_1\_\_1

If "Elongation" is assigned to TypeOfProperty.ValueString  
 And MAX(<|First\_Media|.Elongation) is assigned to Emax  
 And <|First\_Media|.Elongation is precisely equal to Emax.Value  
 And MIN(<|First\_Media|.Elongation) is assigned to Emin  
 And <|First\_Media|.Elongation is precisely equal to Emin.Value  
 Then ElongationNew  
 is confirmed.

RULE : Rule ElongationRank

If 0 is assigned to <|PlasticsRank|.ElongationRank  
 Then RankElongation  
 is confirmed.

RULE : Rule ElongationRankKnown

If <|PlasticsRank|.Elongation is not equal to NOTKNOWN  
 Then RankProperty  
 is confirmed.  
 And Create Object <|PlasticsRank|> |PlasticsKnown|  
 And RankElongationKnown is assigned to RankElongationKnown

RULE : Rule ElongationRankNotknown

If <|PlasticsRank|>.Elongation is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankElongationNotknown is assigned to RankElongationNotknown

RULE : Rule FDA

If there is evidence of |Product|.FDA

Then FDA\_Approval

is confirmed.

And Execute "TestMultiValue"(@WAIT=TRUE,@ATOMID=<|First\_Media|>.

FDA:@STRING="@SUPERSET,@TEST=Yes,@RETURN=Second\_Media";)

And Create Object <|Second\_Media|> |PlasticsFDA|

And Delete Object <|First\_Media|> |First\_Media|

And Create Object <|Second\_Media|> |First\_Media|

And Delete Object <|Second\_Media|> |Second\_Media|

RULE : Rule FDAKnown\_\_1

If 9 is assigned to <|PlasticsKnown|>.FDARank

Then RankFDAKnown

is confirmed.

RULE : Rule FDANotknown

If 0 is assigned to <|PlasticsNotKnown|>.FDARank

Then RankFDANotknown

is confirmed.

RULE : Rule FDAPlasticsMember

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsFDAMember

is confirmed.

And ProductObject.FDA is assigned to <Information>.ValueString

And "FDA\_Approval" is assigned to TypeOfProperty.ValueString

And Create Object <|Second\_Media|> |First\_Media|

And Delete Object <|Second\_Media|> |Second\_Media|

And FDASub is assigned to FDASub

And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)

And FDACHange is assigned to FDACHange

RULE : Rule FDARankKnown

If <|PlasticsRank|>.FDA is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsKnown|

And RankFDAKnown is assigned to RankFDAKnown

RULE : Rule FDARankNotknown

If <|PlasticsRank|>.FDA is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankFDANotknown is assigned to RankFDANotknown

RULE : Rule FDARequired

If <|First\_Media|.FDA is precisely equal to "No"

Then CheckFDA

is confirmed.

And Delete Object <|First\_Media| |First\_Media|

RULE : Rule FDARequired\_\_1

If <|First\_Media|.FDA is precisely equal to "No"

Then CheckNewFDA

is confirmed.

And Delete Object <|First\_Media| |First\_Media|

RULE : Rule FDAValue

If ProductObject.FDA is assigned to |UserRequirement|.FDA

And Create Object PriorityFDA |Priority|

Then RuleFDA

is confirmed.

RULE : Rule FDA\_Constraint

If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|.

FDA;@STRING="@LINKTO=Third\_Media,@CREATEOBJECTS";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third\_Media|>;

@STRING="@ADD,@RETURN=Third\_Media.ValueString";)

And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third\_Media|.ValueString,<|Third\_Media|>.ValueString;)

Then FDASub

is confirmed.

RULE : Rule FDA\_New

If ProductObject.NewValue is assigned to ProductObject.NewValue  
And ProductObject.NewValue is assigned to ProductObject.FDANew  
And ProductObject.FDANew is precisely equal to "Yes"

Then FDAChange

is confirmed.

And CheckNewFDA is assigned to CheckNewFDA

RULE : Rule FDA\_New\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue  
And ProductObject.NewValue is assigned to ProductObject.FDANew  
And ProductObject.FDANew is precisely equal to "No"

Then FDAChange

is confirmed.

RULE : Rule FDA\_Required

If ProductObject.FDA is precisely equal to "No"

Then FDA

is confirmed.

RULE : Rule FDA\_Required\_\_1

If ProductObject.FDA is precisely equal to "Yes"

Then FDA

is confirmed.

And CheckFDA is assigned to CheckFDA

RULE : Rule FindNumberPriority

If MAX(<|Priority|>.Weight) is assigned to Y



And <|Priority|>.Weight is precisely equal to Y.Value

Then Check\_Priority

is confirmed.

And Create Object <|Priority|> |PropertyAll|

And Create Object <|Priority|> |Priority\_Group|

And Delete Object <|Priority|> |Priority|

RULE : Rule FindNumberPriority\_\_1

If there is evidence of PrintabilityImportant

Then NOCheck\_Priority

is confirmed.

And Check\_PrioritySubA is assigned to Check\_PrioritySubA

Else NOCheck\_Priority

is not confirmed.

And Check\_PrioritySubB is assigned to Check\_PrioritySubB

RULE : Rule FindNumberPriority\_\_2

If MIN(<|PrioritySubA|>.NumberPriority) is assigned to Y

And <|PrioritySubA|>.NumberPriority is precisely equal to Y.Value

Then Check\_PrioritySubA

is confirmed.

And Create Object <|PrioritySubA|> |Priority\_Group|

And Delete Object <|PrioritySubA|> |PrioritySubA|

RULE : Rule FindNumberPriority\_\_2\_\_1

If MIN(<|PrioritySubB|>.NumberPriority) is assigned to Y

And <|PrioritySubB|>.NumberPriority is precisely equal to Y.Value

Then Check\_PrioritySubB

is confirmed.

And Create Object <|PrioritySubB|> |Priority\_Group|

And Delete Object <|PrioritySubB|> |PrioritySubB|

**RULE : Rule Glassy**

If there is evidence of GlassLike\_Rigidity

And <|Plastics|>.TemperatureMelting is precisely equal to (0-99999)

And <|Plastics|>.TemperatureGlassMin is not equal to (0-99999)

And ProductObject.TemperatureMax is less than <|Plastics|>.TemperatureGlassMax

Then Structured\_Polymer

is confirmed.

And Create Object <|Plastics|> |PlasticsGlassy|

**RULE : Rule Glassylike**

If there is evidence of GlassLike\_Rigidity

Then Structure

is confirmed.

And GlassLike\_Rigidity is assigned to ProductObject.GlasslikeRigidity

**RULE : Rule GroupProperty**

If |Product|.Printability is assigned to |Product|.Printability

And there is evidence of FDAImportant

Then FDAProperty

is confirmed.

And |Product|.FDA is assigned to |Product|.FDA

And |Product|.Permeability is assigned to |Product|.Permeability

And |Product|.Taste is assigned to |Product|.Taste

And |Product|.Odour is assigned to |Product|.Odour

And TearProperty is assigned to TearProperty

RULE : Rule ImpactI

If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.

ImpactString:@STRING="@LINKTO=Third\_Media,@CREATEOBJECTS";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third\_Media|>;

@STRING="@ADD,@RETURN=Third\_Media.ValueString";)

And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third\_Media|.ValueString,<|Third\_Media|>.ValueString;)

Then ImpactStrengthSub

is confirmed.

RULE : Rule ImpactCheck

If there is evidence of Impact

Then AskImpact

is confirmed.

And RuleImpact is assigned to RuleImpact

RULE : Rule ImpactKnown

If Execute "RankList"(@WAIT=TRUE;@ATOMID=<|PlasticsKnown|>;

@STRING="@RANKBY=ImpactStrength,@RANKSET=ImpactRank,@INCREASING";)

Then RankImpactKnown

is confirmed.

RULE : Rule ImpactNotknown

If 0 is assigned to <|PlasticsNotKnown|>.ImpactRank

Then RankImpactNotknown

is confirmed.

RULE : Rule ImpactRankKnown

If <|PlasticsRank|>.ImpactStrength is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsKnown|

And RankImpactKnown is assigned to RankImpactKnown

RULE : Rule ImpactRankNotknown

If <|PlasticsRank|>.ImpactStrength is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankImpactNotknown is assigned to RankImpactNotknown

RULE : Rule ImpactStrengthHigh

If ProductObject.Impact\_Resistance is precisely equal to "High"

And ImpactStrengthHighSub is assigned to ImpactStrengthHighSub

Then ImpactStrength

is confirmed.

RULE : Rule ImpactStrengthHigh\_\_1

If <|First\_Media|>.ImpactStrength is less than 5

Then ImpactStrengthHighSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE ; Rule ImpactStrengthHigh\_\_2

If <|First\_Media|>.ImpactStrength is greater than or equal to 10

Then ImpactStrengthHighSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthHigh\_\_3

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.Impact\_ResistanceNew

And ProductObject.Impact\_ResistanceNew is precisely equal to "High"

And ImpactStrengthHighSub is assigned to ImpactStrengthHighSub

Then ImpactStrengthChange

is confirmed.

RULE : Rule ImpactStrengthLow

If ProductObject.Impact\_Resistance is precisely equal to "Low"

And <|First\_Media|>.ImpactStrength is greater than or equal to 2

Then ImpactStrength

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthLow\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.Impact\_ResistanceNew

And ProductObject.Impact\_ResistanceNew is precisely equal to "Low"

And <|First\_Media|>.ImpactStrength is greater than or equal to 2

Then ImpactStrengthChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthMedium

If ProductObject.Impact\_Resistance is precisely equal to "Medium"

And ImpactStrengthMedSub is assigned to ImpactStrengthMedSub

Then ImpactStrength

is confirmed.

RULE : Rule ImpactStrengthMedium\_\_1

If <|First\_Media|>.ImpactStrength is less than 2

Then ImpactStrengthMedSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthMedium\_\_2

If <|First\_Media|>.ImpactStrength is greater than or equal to 5

Then ImpactStrengthMedSub

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthMedium\_\_3

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.Impact\_ResistanceNew

And ProductObject.Impact\_ResistanceNew is precisely equal to "Medium"

And ImpactStrengthMedSub is assigned to ImpactStrengthMedSub

Then ImpactStrengthChange

is confirmed.

RULE : Rule ImpactStrengthVeryhigh

If ProductObject.Impact\_Resistance is precisely equal to "VeryHigh"

And <|First\_Media|>.ImpactStrength is less than 10

Then ImpactStrength

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactStrengthVeryhigh\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.Impact\_ResistanceNew

And ProductObject.Impact\_ResistanceNew is precisely equal to "VeryHigh"

And <|First\_Media|>.ImpactStrength is less than 10

Then ImpactStrengthChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule ImpactValue

If ProductObject.Impact\_Resistance is assigned to |UserRequirement|.Impact\_Resistance

And Create Object PriorityImpact |Priority|

Then RuleImpact

is confirmed.

RULE : Rule Information1

If |Product|.TypicalA is precisely equal to "Appliances","Industrial","Automotive","Material

Handling","Electrical and Electronics","Plumbing","Consumer Applications","

Hardware","Irrigation and Agricultural","Building and Construction"

Then FIRST\_START

is confirmed.

And ApplicationSelect is assigned to ApplicationSelect

RULE : Rule Information10

If |Product|.TypicalJ is precisely equal to "Boat

hulls", "Toys", "Luggage", "Furniture", "Opticals", "Handles", "Sheeting", "

Skylights", "Pens", "Signs", "Ski goggles", "Packaging containers", "Medical devices", "Safety glasses", "Steering wheels", "Cosmetic parts", "To

Then ConsumerSelect

is confirmed.

And |Product|.TypicalJ is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),

@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;

@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information11

If |Product|.TypicalA is precisely equal to "Hardware"

Then ApplicationSelect

is confirmed.

And HardwareSelect is assigned to HardwareSelect

RULE : Rule Information12

If |Product|.TypicalB is precisely equal to "Tool holders"

Then HardwareSelect

is confirmed.

And |Product|.TypicalB is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),

@RETURN=PrePlastics,@COMP=STRING";)



And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information13

If |Product|.TypicalA is precisely equal to "Irrigation and Agricultural"

Then ApplicationSelect

is confirmed.

And IrrigationAgriculturalSelect is assigned to IrrigationAgriculturalSelect

RULE : Rule Information14

If |Product|.TypicalC is precisely equal to "Pop-up sprinklers"

Then IrrigationAgriculturalSelect

is confirmed.

And |Product|.TypicalC is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),  
@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;

@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information15

If |Product|.TypicalA is precisely equal to "Appliances"

Then ApplicationSelect

is confirmed.

And AppliancesSelect is assigned to AppliancesSelect

RULE : Rule Information16

If |Product|.TypicalA is precisely equal to "Electrical and Electronics"

Then ApplicationSelect

is confirmed.

And ElectronicsSelect is assigned to ElectronicsSelect

RULE : Rule Information17

If |Product|.TypicalA is precisely equal to "Building and Construction"

Then ApplicationSelect

is confirmed.

And BuildingConstructionSelect is assigned to BuildingConstructionSelect

RULE : Rule Information19

If |Product|.TypicalF is precisely equal to "DWV pipe and fitting","Roof ventilators"

Then BuildingConstructionSelect

is confirmed.

And |Product|.TypicalF is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),

@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;

@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information2

If Execute "ControlSession"(@WAIT=TRUE;@ATOMID=Begin;

@STRING="@UNSUGGEST";)

And |Product|.component is assigned to |Product|.component

And |Product|.TemperatureMin is assigned to |UserRequirement|.TemperatureMin

And |Product|.TemperatureMax is assigned to |UserRequirement|.TemperatureMax

And Structure is assigned to Structure

And DielectricQuestion is assigned to DielectricQuestion

And |Product|.Elongation is assigned to |UserRequirement|.Elongation

And Create Object PriorityElongation |Priority|

Then SEC\_START

is confirmed.

And |Product|.component is assigned to <ProductObject>.component

And |Product|.TemperatureMin is assigned to <ProductObject>.TemperatureMin

And |Product|.TemperatureMax is assigned to <ProductObject>.TemperatureMax

And |Product|.Elongation is assigned to <ProductObject>.Elongation

And SEC\_START1 is assigned to SEC\_START1

RULE : Rule Information20

If |Product|.TypicalA is precisely equal to "Automotive"

Then ApplicationSelect

is confirmed.

And AutomotiveSelect is assigned to AutomotiveSelect

RULE : Rule Information21

If |Product|.TypicalG is precisely equal to "Knobs", "Mirrior housing", "Wheel covers", "Decorative trim", "Grilles", "Light housings", "Instrument panels", "Automobile trim", "Automotive hose", "Tubing", "Wire jacketing", "Automotive parts"

Then AutomotiveSelect

is confirmed.

And |Product|.TypicalG is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct:@STRING="@SUPERSET,@TEST=@V(Product.Typical),

@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
 @STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information22

If |Product|.TypicalID is precisely equal to "Counter-top appliances", "Mixers", "Refrigerator door", "Tank liners", "Vacuum sweepers", "Medical instrumentation"

Then AppliancesSelect

is confirmed.

And |Product|.TypicalID is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),  
 @RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
 @STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information23

If |Product|.TypicalH is precisely equal to "Gears", "Cams", "Bearings", "Chain links", "Springs", "Valves", "Fitting", "Industrial hoses", "Mining cable jacketing", "Gaskets", "Seals", "Wire", "Cable", "Piping", "Cryogenic seals"

Then IndustrialSelect

is confirmed.

And |Product|.TypicalH is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.

TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),  
 @RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
 @STRING="@RETURN=|PrePlastics|.Name";)

**RULE : Rule Information3**

**If** ProductObject.Dens is assigned to |UserRequirement|.Dens

And ProductObject.TensileS is assigned to |UserRequirement|.TensileS

And Create Object PriorityDensity |Priority|

And Create Object PriorityTensileStrength |Priority|

**Then** SEC\_START1

is confirmed.

And AskImpact is assigned to AskImpact

And AskChemical is assigned to AskChemical

And AskFDA is assigned to AskFDA

And AskOutdoorWeathering is assigned to AskOutdoorWeathering

And Execute "Inform.win4"(@TYPE=FRM;@WAIT=TRUE;)

And Execute "Inform.win7"(@TYPE=FRM;@WAIT=TRUE;)

And Execute "Inform.win5"(@TYPE=FRM;@WAIT=TRUE;)

And CheckWeight is assigned to CheckWeight

**RULE : Rule Information4\_\_2**

**If** |Product|.TypicalA is precisely equal to "Industrial"

**Then** ApplicationSelect

is confirmed.

And IndustrialSelect is assigned to IndustrialSelect

**RULE : Rule Information5**

**If** |Product|.TypicalE is precisely equal to "Computer

keyboards","Telephones","Connector","Potentiometer housings","Switches","Relays","Circuit

breakers","Terminal strips","Coil bobbins","Electrical product","Electronic product"

**Then** ElectronicsSelect

is confirmed.

And |Product|.TypicalE is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.  
TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),  
@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information6

If |Product|.TypicalA is precisely equal to "Plumbing"

Then ApplicationSelect

is confirmed.

And PlumbingSelect is assigned to PlumbingSelect

RULE : Rule Information8

If |Product|.TypicalI is precisely equal to "Water-meter housing"

Then PlumbingSelect

is confirmed.

And |Product|.TypicalI is assigned to |Product|.Typical

And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.  
TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),  
@RETURN=PrePlastics,@COMP=STRING";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;  
@STRING="@RETURN=|PrePlastics|.Name";)

RULE : Rule Information9

If |Product|.TypicalA is precisely equal to "Consumer Applications"

Then ApplicationSelect

is confirmed.

And ConsumerSelect is assigned to ConsumerSelect

RULE : Rule Leather

If there is evidence of Leather\_Properties

Then Structure

is confirmed.

And Leather\_Properties is assigned to ProductObject.Leaner

RULE : Rule LeatherLike

If there is evidence of Leather\_Properties

And <|Plastics|>.TemperatureMelting is precisely equal to (0-99999)

And ProductObject.TemperatureMin is greater than or equal to <|Plastics|>.

TemperatureGlassMin+10

And ProductObject.TemperatureMax is less than or equal to

<|Plastics|>.TemperatureGlassMax-10

Then Structured\_Polymer

is confirmed.

And Create Object <|Plastics|> |PlasticsLeather|

RULE : Rule OutdoorExcellent

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.OutdoorNew

And ProductObject.OutdoorNew is precisely equal to "Excellent"

And <|First\_Media|>.OutdoorWeather is not equal to "Excellent, NOTKNOWN"

Then OutdoorChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdoorKnown

If 9 is assigned to <|PlasticsKnown|>.OutdoorRank

Then RankOutdoorKnown

is confirmed.

RULE : Rule OutdoorNotknown

If 0 is assigned to <|PlasticsNotKnown|>.OutdoorRank

Then RankOutdoorNotknown

is confirmed.

RULE : Rule OutdoorRankKnown\_\_1

If <|PlasticsRank|>.OutdoorWeather is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsKnown|

And RankOutdoorKnown is assigned to RankOutdoorKnown

RULE : Rule OutdoorRankNotknown

If <|PlasticsRank|>.OutdoorWeather is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank|> |PlasticsNotKnown|

And RankOutdoorNotknown is assigned to RankOutdoorNotknown

RULE : Rule OutdoorRequired

If ProductObject.OutdoorWeather is precisely equal to "Excellent"

Then OutDoorWeathering

is confirmed.



And CheckOutdoor is assigned to CheckOutdoor

RULE : Rule OutdoorRequired\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Good"

Then OutDoorWeathering

is confirmed.

And CheckOutdoorGood is assigned to CheckOutdoorGood

RULE : Rule OutdoorRequired\_\_1\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Fair"

Then OutDoorWeathering

is confirmed.

And CheckOutdoorFair is assigned to CheckOutdoorFair

RULE : Rule OutdoorRequired\_\_1\_\_1\_\_1

If ProductObject.OutdoorWeather is precisely equal to "Poor"

Then OutDoorWeathering

is confirmed.

And CheckOutdoorPoor is assigned to CheckOutdoorPoor

RULE : Rule OutdoorSelect

If <|First\_Media|>.OutdoorWeather is not equal to "Excellent, NOTKNOWN"

Then CheckOutdoor

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdoorSelect\_\_1

If <|First\_Media|>.OutdoorWeather is not equal to "Excellent, Good, NOTKNOWN"

Then CheckOutdoorGood

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdoorSelect\_\_1\_\_1

If <|First\_Media|.OutdoorWeather is precisely equal to "Poor"

Then CheckOutdoorFair

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdoorSelect\_\_1\_\_1\_\_1

If <|First\_Media|.OutdoorWeather is precisely equal to "Poor"

Then CheckOutdoorPoor

is confirmed.

RULE : Rule OutdoorSub

If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.

OutdoorWeather;@STRING="@LINKTO=Third\_Media,@CREATEOBJECTS";)

And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third\_Media|>;

@STRING="@ADD,@RETURN=|Third\_Media|.ValueString";)

And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third\_Media|.ValueString,<|Third\_Media|>.ValueString;)

Then OutdoorSub

is confirmed.

RULE : Rule OutdootFairChange

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.OutdoorNew

And ProductObject.OutdoorNew is precisely equal to "Fair"

And <|First\_Media|.OutdoorWeather is precisely equal to "Poor"

Then OutdoorChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdootGoodChange

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.OutdoorNew

And ProductObject.OutdoorNew is precisely equal to "Good"

And <|First\_Media|.OutdoorWeather is not equal to "Excellent, Good, NOTKNOWN"

Then OutdoorChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule OutdootPoorChange

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.OutdoorNew

And ProductObject.OutdoorNew is precisely equal to "Poor"

Then OutdoorChange

is confirmed.

RULE : Rule PlasticsChemicalMember

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsChemicalMember

is confirmed.

And |ProductChemical|.ChemicalResistance is assigned to <Information>.ValueString  
 And "Chemical Resistance" is assigned to TypeOfProperty.ValueString  
 And Create Object <|Second\_Media|> |First\_Media|  
 And ChemicalSub is assigned to ChemicalSub  
 And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)  
 And Delete Object <|PlasticsChemicalResistance|> |PlasticsChemicalResistance|  
 And Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.  
 ChemicalResistance;@STRING="@SUPERSET,@TEST=@V(|ProductChemical|.ChemicalR  
 esistance),@RETURN=PlasticsChemicalResistance";)  
 And Delete Object <|First\_Media|> |First\_Media|  
 And Create Object <|PlasticsChemicalResistance|> |First\_Media|

RULE : Rule PlasticsMember

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsDielectricMember

is confirmed.

And ProductObject.Dielectric is assigned to <Information>.ValueString

And "DielectricStrength" is assigned to TypeOfProperty.ValueString

And Create Object <|Second\_Media|> |First\_Media|

And Delete Object <|Second\_Media|> |Second\_Media|

And DielectricSub is assigned to DielectricSub

And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)

And Reset DielectricStrengthSub

And DielectricChange is assigned to DielectricChange

RULE : Rule PlasticsMember\_\_1

If LENGTH(<|First\_Media|>) is assigned to T  
 And T is assigned to |Media|.TotalPlastics  
 And |Media|.TotalPlastics is precisely equal to 0  
 Then CheckPlasticsTensileMember  
 is confirmed.  
 And ProductObject.TensileS is assigned to <Information>.ValueString  
 And "TensileStrength" is assigned to TypeOfProperty.ValueString  
 And Create Object <|Second\_Media|> |First\_Media|  
 And Delete Object <|Second\_Media|> |Second\_Media|  
 And TensileStrengthSub is assigned to TensileStrengthSub  
 And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)  
 And TensileStrengthChange is assigned to TensileStrengthChange

RULE : Rule PlasticsMember\_\_2

If LENGTH(<|First\_Media|>) is assigned to T  
 And T is assigned to |Media|.TotalPlastics  
 And |Media|.TotalPlastics is precisely equal to 0  
 Then CheckPlasticsImpactMember  
 is confirmed.  
 And ProductObject.Impact\_Resistance is assigned to <Information>.ValueString  
 And "ImpactStrength" is assigned to TypeOfProperty.ValueString  
 And Create Object <|Second\_Media|> |First\_Media|  
 And ImpactStrengthSub is assigned to ImpactStrengthSub  
 And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)  
 And Reset ImpactStrengthHighSub  
 And Reset ImpactStrengthMedSub  
 And ImpactStrengthChange is assigned to ImpactStrengthChange

RULE : Rule PlasticsMember\_\_3

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsElongationMember

is confirmed.

And ProductObject.Elongation is assigned to <Information>.ValueNum

And "Elongation" is assigned to <TypeOfProperty>.ValueString

And Create Object <|Second\_Media|> |First\_Media|

And ElongationNew is assigned to ElongationNew

And ElongationChange is assigned to ElongationChange

RULE : Rule PlasticsMember\_\_4

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsDensityMember

is confirmed.

And ProductObject.Dens is assigned to <Information>.ValueString

And "Density" is assigned to TypeOfProperty.ValueString

And Create Object <|Second\_Media|> |First\_Media|

And DensitySub is assigned to DensitySub

And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)

And DensityChange is assigned to DensityChange

RULE : Rule PlasticsMember\_\_4\_\_1

If LENGTH(<|First\_Media|>) is assigned to T

And T is assigned to |Media|.TotalPlastics

And |Media|.TotalPlastics is precisely equal to 0

Then CheckPlasticsOutdoorWeatherMember

is confirmed.

And ProductObject.OutdoorWeather is assigned to <Information>.ValueString

And "OutdoorWeathering" is assigned to TypeOfProperty.ValueString

And Create Object <|Second\_Media|> |First\_Media|

And OutdoorSub is assigned to OutdoorSub

And Execute "Inform.win8"(@TYPE=FRM;@WAIT=TRUE;)

And OutdoorChange is assigned to OutdoorChange

RULE : Rule PropertyElectrical

If |Product|.DielectricStrength is assigned to |Product|.DielectricStrength

And |Product|.ArcResist is assigned to |Product|.ArcResist

Then ElectricalProperty

is confirmed.

And Execute

"ControlSession"(@WAIT=TRUE;@ATOMID=Begin;@STRING="@SUGGEST";)

RULE : Rule ResetDetail

If Reset DESCRIPTION

And Delete Object <|DetailPlastics|> |DetailPlastics|

And Execute "ResetFrame"(@WAIT=TRUE;@ATOMID=|DetailPlastics|;)

And Reset RESETSHOW

Then RESETSHOW

is confirmed.

RULE : Rule R\_DielectricSub

If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.  
 DielectricString;@STRING="@LINKTO=Third\_Media,@CREATEOBJECTS";)  
 And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third\_Media|>;  
 @STRING="@ADD,@RETURN=Third\_Media.ValueString";)  
 And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third\_Media|.ValueString,<|  
 Third\_Media|>.ValueString;)  
 Then DielectricSub  
 is confirmed.

RULE : Rule R\_DielectricSub\_\_1\_\_1

If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First\_Media|>.  
 DensityString;@STRING="@LINKTO=Third\_Media,@CREATEOBJECTS";)  
 And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third\_Media|>;  
 @STRING="@ADD,@RETURN=|Third\_Media|.ValueString";)  
 And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third\_Media|.ValueString,<|  
 Third\_Media|>.ValueString;)  
 Then DensitySub  
 is confirmed.

RULE : Rule R\_RankDensity\_\_1

If 1 is assigned to <|PlasticsRank|>.DielectricRank  
 Then RankDensity  
 is confirmed.

RULE : Rule ScoreCalculation

If ((<|PropertyAll|>.Weight)\*(<|PropertyAll|>.Perform-4.5)+46) is assigned to <|  
 PropertyAll|>.Score  
 Then CalScore



is confirmed.

And PROD(<|PropertyAll|>.Score) is assigned to SumScore

And ABS(SumScore) is assigned to ABSSumScore

And ABSSumScore is assigned to <|PlasticsCal|>.ObjectScore

RULE : Rule SelectSession

If there is evidence of Check\_Priority

Then Select\_Session

is confirmed.

And SelectPlastics is assigned to SelectPlastics

And Clear\_Value is assigned to Clear\_Value

RULE : Rule Semicrystalike

If there is evidence of Moderate\_Rigidity

Then Structure

is confirmed.

And Moderate\_Rigidity is assigned to ProductObject.ModerateRigidity

RULE : Rule Semicrystalline

If there is evidence of Moderate\_Rigidity

And <|Plastics|>.TemperatureGlassMax is not equal to (0-99999)

And <|Plastics|>.TemperatureGlassMin is not equal to 99999

And <|Plastics|>.TemperatureMelting is not equal to (0-99999)

And ProductObject.TemperatureMin is greater than <|Plastics|>.TemperatureGlassMin

And ProductObject.TemperatureMax is less than <|Plastics|>.TemperatureMelting

Then Structured\_Polymer

is confirmed.

And Create Object <|Plastics|> |PlasticsSemicrystalline|

RULE : Rule SubChemical

```
If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First_Media|>.
ChemicalResistance;@STRING="@LINKTO=Third_Media,@CREATEOBJECTS";)
  And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third_Media|>;
@STRING="@ADD,@RETURN=|Third_Media|.ValueString";)
  And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third_Media|.ValueString,<|
Third_Media|>.ValueString;)
Then ChemicalSub
  is confirmed.
```

RULE : Rule Tensile1

```
If Execute "LinkMultiValue"(@WAIT=TRUE;@ATOMID=<|First_Media|>.
TensileStrengthString;@STRING="@LINKTO=Third_Media,@CREATEOBJECTS";)
  And Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|Third_Media|>;
@STRING="@ADD,@RETURN=Third_Media.ValueString";)
  And Execute "GetMultiValue"(@WAIT=TRUE;@ATOMID=|Third_Media|.ValueString,<|
Third_Media|>.ValueString;)
Then TensileStrengthSub
  is confirmed.
```

RULE : Rule TensileKnown

```
If Execute "RankList"(@WAIT=TRUE;@ATOMID=<|PlasticsKnown|>;
@STRING="@RANKBY=TensileStrength,@RANKSET=TensileStrengthRank,@INCREAS
ING";)
Then RankTensileKnown
  is confirmed.
```

RULE : Rule TensileNotknown

If 0 is assigned to <|PlasticsNotKnown|.TensileStrengthRank

Then RankTensileNotknown

is confirmed.

RULE : Rule TensileRank

If 0 is assigned to <|PlasticsRank|.TensileStrengthRank

Then RankTensile

is confirmed.

RULE : Rule TensileRankKnown

If <|PlasticsRank|.TensileStrength is not equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank| |PlasticsKnown|

And RankTensileKnown is assigned to RankTensileKnown

RULE : Rule TensileRankNotknown

If <|PlasticsRank|.TensileStrength is precisely equal to NOTKNOWN

Then RankProperty

is confirmed.

And Create Object <|PlasticsRank| |PlasticsNotKnown|

And RankTensileNotknown is assigned to RankTensileNotknown

RULE : Rule TensileStrengthHigh

If ProductObject.TensileS is precisely equal to "High"

And <|First\_Media|.TensileStrength is less than 5

Then TensileStrength

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule TensileStrengthHigh\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.TensileSNew

And ProductObject.TensileSNew is precisely equal to "High"

And <|First\_Media|>.TensileStrength is less than 5

Then TensileStrengthChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule TensileStrengthLow\_\_1

If ProductObject.TensileS is precisely equal to "Low"

And <|First\_Media|>.TensileStrength is greater than or equal to 5

Then TensileStrength

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule TensileStrengthLow\_\_1\_\_1

If ProductObject.NewValue is assigned to ProductObject.NewValue

And ProductObject.NewValue is assigned to ProductObject.TensileSNew

And ProductObject.TensileSNew is precisely equal to "Low"

And <|First\_Media|>.TensileStrength is greater than or equal to 5

Then TensileStrengthChange

is confirmed.

And Delete Object <|First\_Media|> |First\_Media|

RULE : Rule Weight1

If <|Priority|.Weight is assigned to <|Priority|.Weight

Then CheckWeight

is confirmed.

## ภาคผนวก ข

### ตัวอย่างการทดสอบโปรแกรม

#### ตัวอย่างทดสอบโปรแกรม ข1

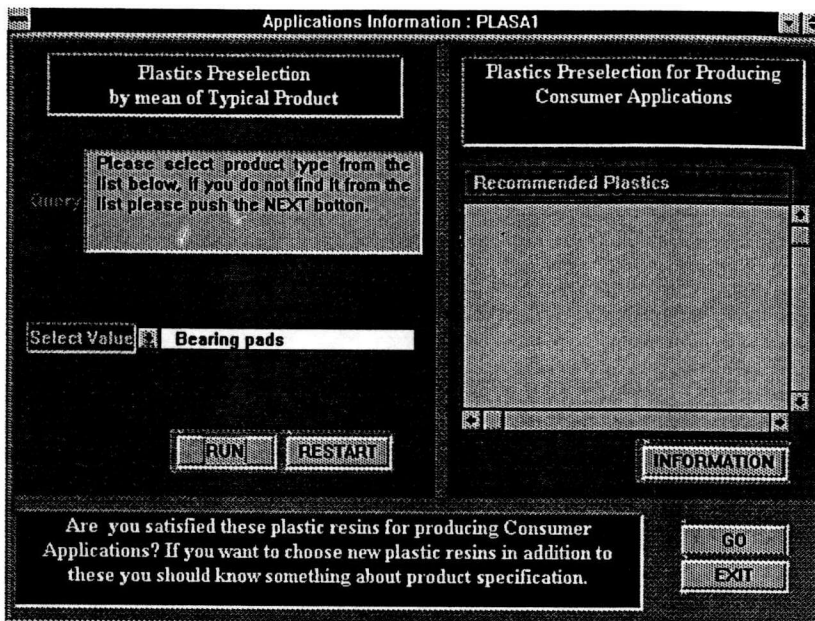
เป็นตัวอย่างการรันโปรแกรมในกรณีที่ผลิตภัณฑ์พลาสติกที่ต้องการผลิตมีอยู่ในฐานความรู้ ซึ่งจะให้ผู้ใช้เลือกชนิดของผลิตภัณฑ์จากรายชื่อกลุ่มผลิตภัณฑ์หลักที่มีอยู่ 9 กลุ่มใหญ่ดังต่อไปนี้

"Appliances, Industrial, Automotive, Material Handling, Electrical and Electronics, Plumbing, Consumer Applications, Hardware, Irrigation and Agricultural, Building and Construction"

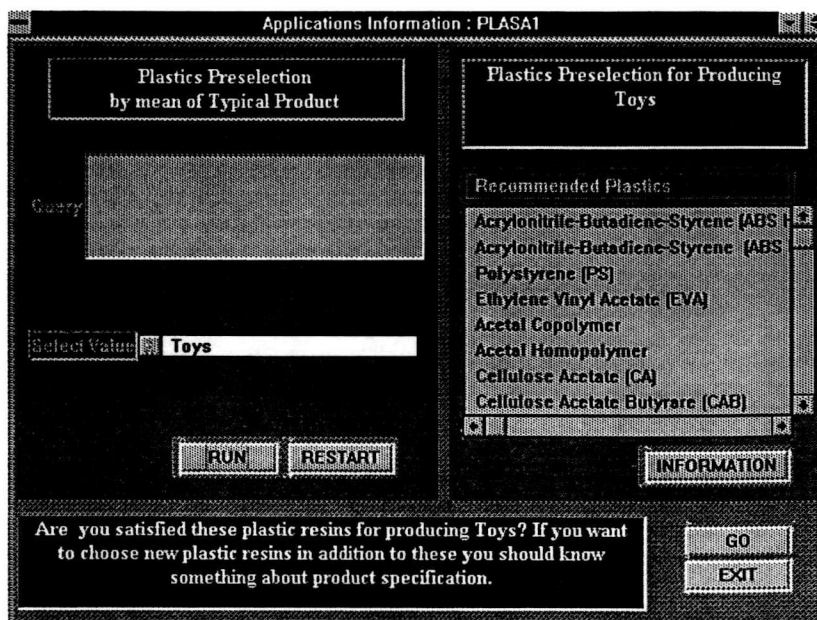
ในตัวอย่างนี้ผู้ใช้เลือกกลุ่มผลิตภัณฑ์ Consumer Applications

PLASA I จะทำการค้นหาผลิตภัณฑ์ต่อไปที่เกี่ยวข้องกับกลุ่มผลิตภัณฑ์ Consumer Applications และผู้ใช้ทำการเลือกชนิดของผลิตภัณฑ์ย่อยในกลุ่ม Consumer Applications คือ Toys

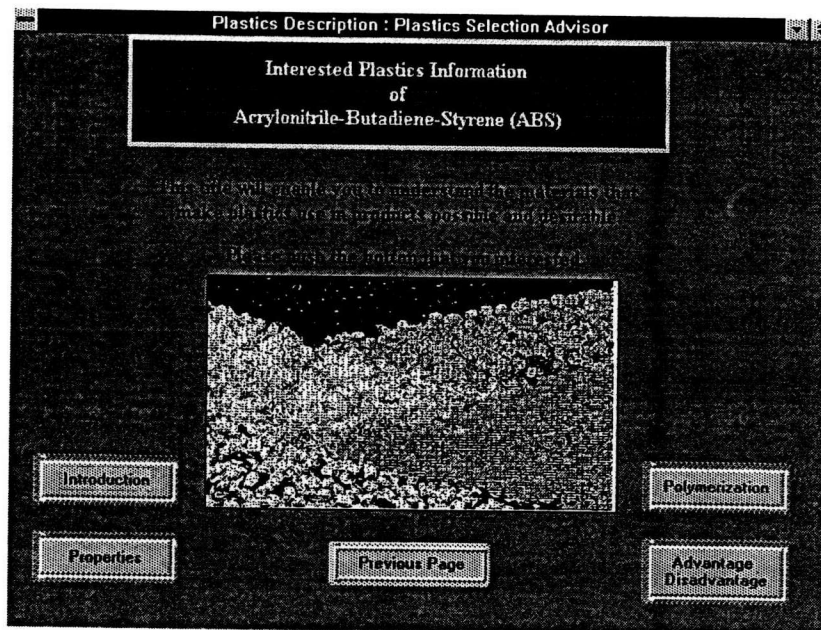
PLASA I จะทำการค้นหาชนิดพลาสติกในฐานความรู้ และแสดงผลของพลาสติกที่ตรงกับความต้องการของผู้ใช้ แสดงดังรูปที่ ข1 และ ข2 นอกจากนี้ PLASA I สามารถแสดงข้อมูลอื่นๆ เกี่ยวกับพลาสติกที่ทำการเลือกมาได้นั้น เช่น ประวัติ และความเป็นมา, สมบัติต่างๆ, กระบวนการเกิดพอลิเมอร์, ข้อดี และข้อด้อย ของพลาสติกชนิดนั้น แสดงดังรูปที่ ข3 และ ข4



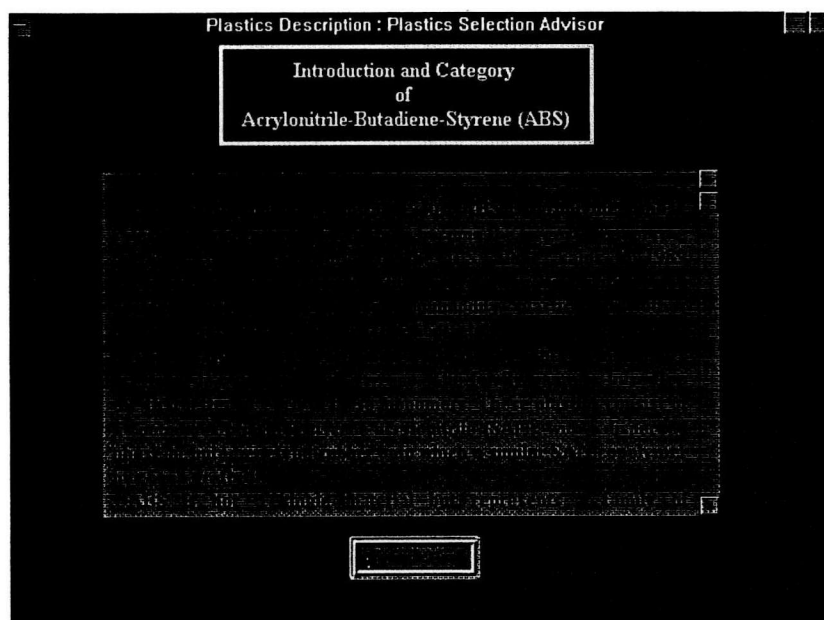
รูปที่ ข1 แสดงคำถามและเมนูการเลือกพลาสติกในการผลิตของเด็กเล่น



รูปที่ ข2 แสดงผลการเลือกพลาสติกที่ใช้ผลิตผลิตภัณฑ์ของเด็กเล่น



รูปที่ ข3 แสดงหน้าต่างรายละเอียดข้อมูลพลาสติกแต่ละชนิดที่ผู้ใช้ผลิตผลิตภัณฑ์ของเด็กเล่น



รูปที่ ข4 แสดงการอธิบายข้อมูลพลาสติกแต่ละชนิด



ส่วนการรันโปรแกรมในช่วง Session แสดงดังต่อไปนี้

```
# UHMWPE.TensileStrengthString is set to Low
# UHMWPE.TensileStrength is set to 4.45
# UHMWPE.TemperatureMelting is set to 270.0
# UHMWPE.TemperatureGlassMin is set to NotKnown
# UHMWPE.TemperatureGlassMax is set to NotKnown
# UHMWPE.OutdoorWeather is set to NotKnown
# UHMWPE.Name is set to UHMW Polyethylene (UHMWPE)
# UHMWPE.ImpactString is set to NotKnown
# UHMWPE.ImpactStrength is set to NotKnown
# UHMWPE.FDA is set to Yes
# UHMWPE.Elongation is set to 300.0
# UHMWPE.DielectricString is set to High
# UHMWPE.DielectricStrength is set to 475.0
# UHMWPE.DetailWin is set to Detail.WinUHMWPE
# UHMWPE.DensityString is set to Light
# UHMWPE.Density is set to 58.1
# UHMWPE.ChemicalResistance is set to Weak_Acid, Strong_Acid, Weak_Alkali,
Strong_Alkali, Alcohol
# SAN.TypicalProduct is set to Tumblers, Mugs, Bath accessories, Ice buckets, Bowls, Trays,
Refrigerator drawers, Vacuum cleaner parts, Humidifier parts, Washing machine detergent
dispensers, Lenses, Instrument panels, Cassette cases and windows, Phonograph covers, Meter
lenses
# SAN.Transparency is set to YES
# SAN.TensileStrengthString is set to High
# SAN.TensileStrength is set to 9.65
# SAN.TemperatureMelting is set to -99999.0
# SAN.TemperatureGlassMin is set to 239.0
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# SAN.TemperatureGlassMax is set to 239.0  
# SAN.OutdoorWeather is set to Poor  
# SAN.Name is set to Styrene-Acrylonitrile (SAN)  
# SAN.ImpactString is set to Low  
# SAN.ImpactStrength is set to 0.35  
# SAN.FDA is set to No  
# SAN:Elongation is set to 2.75  
# SAN.DielectricString is set to Medium  
# SAN.DielectricStrength is set to 350.0  
# SAN.DetailWin is set to Detail.WinSAN  
# SAN.DensityString is set to Heavy  
# SAN.Density is set to 67.0  
# SAN.CompressiveStrength is set to 1.0  
# SAN.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali  
# PVDF.TensileStrengthString is set to High  
# PVDF.TensileStrength is set to 6.7  
# PVDF.TemperatureMelting is set to 338.0  
# PVDF.TemperatureGlassMin is set to -40.0  
# PVDF.TemperatureGlassMax is set to -40.0  
# PVDF.OutdoorWeather is set to Excellent  
# PVDF.Name is set to Polyvinylidene Fluoride  
# PVDF.ImpactString is set to High  
# PVDF.ImpactStrength is set to 6.4  
# PVDF.FDA is set to NotKnown  
# PVDF.Elongation is set to 15.0  
# PVDF.DielectricString is set to VeryHigh  
# PVDF.DielectricStrength is set to 780.0  
# PVDF.DetailWin is set to Detail.WinPVDF

# PVDF.DensityString is set to Heavy

# PVDF.Density is set to 110.0

# PVDF.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali, Ketone, Chlorinated\_Solvent, Alcohol

# PVC\_Rigid.TensileStrengthString is set to High

# PVC\_Rigid.TensileStrength is set to 6.75

# PVC\_Rigid.TemperatureMelting is set to 347.0

# PVC\_Rigid.TemperatureGlassMin is set to 178.0

# PVC\_Rigid.TemperatureGlassMax is set to 178.0

# PVC\_Rigid.OutdoorWeather is set to NotKnown

# PVC\_Rigid.Name is set to Polyvinylchloride (PVC Rigid)

# PVC\_Rigid.ImpactString is set to VeryHigh

# PVC\_Rigid.ImpactStrength is set to 11.2

# PVC\_Rigid.FDA is set to NotKnown

# PVC\_Rigid.Elongation is set to 60.0

# PVC\_Rigid.DielectricString is set to NotKnown

# PVC\_Rigid.DielectricStrength is set to NotKnown

# PVC\_Rigid.DetailWin is set to Detail.WinPVC\_Rigid

# PVC\_Rigid.DensityString is set to Heavy

# PVC\_Rigid.Density is set to 90.85

# PVC\_Rigid.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali, Alcohol

# PVC\_Flexible.TensileStrengthString is set to Low

# PVC\_Flexible.TensileStrength is set to 2.3

# PVC\_Flexible.TemperatureMelting is set to NotKnown

# PVC\_Flexible.TemperatureGlassMin is set to NotKnown

# PVC\_Flexible.TemperatureGlassMax is set to NotKnown

# PVC\_Flexible.OutdoorWeather is set to NotKnown

# PVC\_Flexible.Name is set to Polyvinylchloride (PVC Flexible)

# PVC\_Flexible.ImpactString is set to NotKnown

# PVC\_Flexible.ImpactStrength is set to NotKnown

# PVC\_Flexible.FDA is set to No

# PVC\_Flexible.Elongation is set to 300.0

# PVC\_Flexible.DielectricString is set to Medium

# PVC\_Flexible.DielectricStrength is set to 325.0

# PVC\_Flexible.DetailWin is set to Detail.WinPVC\_Flexible

# PVC\_Flexible.DensityString is set to Heavy

# PVC\_Flexible.Density is set to 89.75

# PVC\_Flexible.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali,  
Strong\_Alkali

# PU\_TPs.TensileStrengthString is set to High

# PU\_TPs.TensileStrength is set to 6.25

# PU\_TPs.TemperatureMelting is set to -99999.0

# PU\_TPs.TemperatureGlassMin is set to -60.0

# PU\_TPs.TemperatureGlassMax is set to -60.0

# PU\_TPs.OutdoorWeather is set to NotKnown

# PU\_TPs.Name is set to Polyurethane TPs (PU )

# PU\_TPs.ImpactString is set to NotKnown

# PU\_TPs.ImpactStrength is set to NotKnown

# PU\_TPs.FDA is set to Yes

# PU\_TPs.Elongation is set to 555.0

# PU\_TPs.DielectricString is set to NotKnown

# PU\_TPs.DielectricStrength is set to NotKnown

# PU\_TPs.DetailWin is set to Detail.WinPUTPs

# PU\_TPs.DensityString is set to Heavy

# PU\_TPs.Density is set to 74.5

# PU\_TPs.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali,  
Strong\_Alkali, Ketone, Chlorinated\_Solvent, Alcohol

# PTFE.TypicalProduct is set to Gaskets, Seals, Tank liners, Valves, Piping, Wire, Cable,  
Electrical product, Cookware, Medical device, Fabric

# PTFE.TensileStrengthString is set to Low

# PTFE.TensileStrength is set to 3.0

# PTFE.TemperatureMelting is set to 621.0

# PTFE.TemperatureGlassMin is set to -73.3

# PTFE.TemperatureGlassMax is set to -73.3

# PTFE.OutdoorWeather is set to Excellent

# PTFE.Name is set to Polytetrafluoroethylene (PTFE)

# PTFE.ImpactString is set to NotKnown

# PTFE.ImpactStrength is set to NotKnown

# PTFE.FDA is set to Yes

# PTFE.Elongation is set to 40.0

# PTFE.DielectricString is set to VeryHigh

# PTFE.DielectricStrength is set to 645.0

# PTFE.DetailWin is set to Detail.WinPTFE

# PTFE.DensityString is set to Heavy

# PTFE.Density is set to 137.0

# PTFE.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali,  
Ketone, Chlorinated\_Solvent, Alcohol

# PSO.TensileStrengthString is set to High

# PSO.TensileStrength is set to 10.2

# PSO.TemperatureMelting is set to -99999.0

# PSO.TemperatureGlassMin is set to 364.0

# PSO.TemperatureGlassMax is set to 364.0

# PSO.OutdoorWeather is set to NotKnown

# PSO.Name is set to Polysulfone (PSO)  
# PSO.ImpactString is set to Low  
# PSO.ImpactStrength is set to 1.3  
# PSO.FDA is set to Yes  
# PSO.Elongation is set to 75.0  
# PSO.DielectricString is set to High  
# PSO.DielectricStrength is set to 425.0  
# PSO.DetailWin is set to Detail.WinPSO  
# PSO.DensityString is set to Heavy  
# PSO.Density is set to 77.3  
# PSO.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali,  
Alcohol  
# PS.TypicalProduct is set to Lighting diffusers, glazing, Trays, Envelope windows, Blister  
packs, Packaging, Egg cartons, Plates, Bowls, Cups, Building panels, Insulation, Disposables,  
Electronics equipment, Toys, Housewares, Medical Product, Appliances, Vacuum sweepers  
# PS.TensileStrengthString is set to High  
# PS.TensileStrength is set to 6.45  
# PS.TemperatureMelting is set to -99999.0  
# PS.TemperatureGlassMin is set to 165.0  
# PS.TemperatureGlassMax is set to 230.0  
# PS.OutdoorWeather is set to NotKnown  
# PS.Name is set to Polystyrene (PS)  
# PS.ImpactString is set to Medium  
# PS.ImpactStrength is set to 0.35  
# PS.FDA is set to NotKnown  
# PS.Elongation is set to 2.4  
# PS.DielectricString is set to VeryHigh  
# PS.DielectricStrength is set to 500.0

# PS.DetailWin is set to Detail.WinPS

# PS.DensityString is set to Heavy

# PS.Density is set to 65.1

# PS.CompressiveStrength is set to 13.53

# PS.ChemicalResistance is set to NotKnown

# Polypropylene.TensileStrengthString is set to High

# Polypropylene.TensileStrength is set to 5.15

# Polypropylene.TemperatureMelting is set to 327.0

# Polypropylene.TemperatureGlassMin is set to -4.0

# Polypropylene.TemperatureGlassMax is set to -4.0

# Polypropylene.OutdoorWeather is set to NotKnown

# Polypropylene.Name is set to Polypropylene (PP)

# Polypropylene.ImpactString is set to Low

# Polypropylene.ImpactStrength is set to 0.7

# Polypropylene.FDA is set to NotKnown

# Polypropylene.Elongation is set to NotKnown

# Polypropylene.DielectricString is set to VeryHigh

# Polypropylene.DielectricStrength is set to 650.0

# Polypropylene.DetailWin is set to Detail.WinPolypropylene

# Polypropylene.DensityString is set to Light

# Polypropylene.Density is set to 56.4

# Polypropylene.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali,  
Ketone, Chlorinated\_Solvent, Alcohol

# PolyphenyleneEther.TensileStrengthString is set to High

# PolyphenyleneEther.TensileStrength is set to 11.0

# PolyphenyleneEther.TemperatureMelting is set to -99999.0

# PolyphenyleneEther.TemperatureGlassMin is set to 212.0

# PolyphenyleneEther.TemperatureGlassMax is set to 302.0

# PolyphenyleneEther.OutdoorWeather is set to NotKnown  
# PolyphenyleneEther.Name is set to Polyphenylene ether (PPE)  
# PolyphenyleneEther.ImpactString is set to High  
# PolyphenyleneEther.ImpactStrength is set to 6.0  
# PolyphenyleneEther.FDA is set to Yes  
# PolyphenyleneEther.Elongation is set to 2.5  
# PolyphenyleneEther.DielectricString is set to VeryHigh  
# PolyphenyleneEther.DielectricStrength is set to 550.0  
# PolyphenyleneEther.DetailWin is set to Detail.WinPPE  
# PolyphenyleneEther.DensityString is set to Heavy  
# PolyphenyleneEther.Density is set to 67.05  
# PolyphenyleneEther.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali,  
Strong\_Alkali  
# Polybutylene.TensileStrengthString is set to Low  
# Polybutylene.TensileStrength is set to 4.86  
# Polybutylene.TemperatureMelting is set to 265.5  
# Polybutylene.TemperatureGlassMin is set to -13.0  
# Polybutylene.TemperatureGlassMax is set to -4.0  
# Polybutylene.OutdoorWeather is set to Poor  
# Polybutylene.Name is set to Polybutylene  
# Polybutylene.ImpactString is set to VeryHigh  
# Polybutylene.ImpactStrength is set to 13.5  
# Polybutylene.FDA is set to Yes  
# Polybutylene.Elongation is set to 287.5  
# Polybutylene.DielectricString is set to NotKnown  
# Polybutylene.DielectricStrength is set to NotKnown  
# Polybutylene.DetailWin is set to Detail.WinPolybutylene  
# Polybutylene.DensityString is set to Light



# Polybutylene.Density is set to 58.5

# Polybutylene.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Alcohol

# Polyarylate.TensileStrengthString is set to High

# Polyarylate.TensileStrength is set to 9.5

# Polyarylate.TemperatureMelting is set to -99999.0

# Polyarylate.TemperatureGlassMin is set to 370.0

# Polyarylate.TemperatureGlassMax is set to 370.0

# Polyarylate.OutdoorWeather is set to Poor

# Polyarylate.Name is set to Polyarylate

# Polyarylate.ImpactString is set to Medium

# Polyarylate.ImpactStrength is set to 4.2

# Polyarylate.FDA is set to NotKnown

# Polyarylate.Elongation is set to 50.0

# Polyarylate.DielectricString is set to High

# Polyarylate.DielectricStrength is set to 400.0

# Polyarylate.DetailWin is set to Detail.WinPolyarylate

# Polyarylate.DensityString is set to Heavy

# Polyarylate.Density is set to 75.0

# Polyarylate.ChemicalResistance is set to NotKnown

# PMMA.TensileStrengthString is set to High

# PMMA.TensileStrength is set to 9.0

# PMMA.TemperatureMelting is set to -99999.0

# PMMA.TemperatureGlassMin is set to 185.0

# PMMA.TemperatureGlassMax is set to 217.0

# PMMA.OutdoorWeather is set to Poor

# PMMA.Name is set to Polymethyl methacrylate (PMMA)

# PMMA.ImpactString is set to Low

# PMMA.ImpactStrength is set to 0.45

# PMMA.FDA is set to No

# PMMA.Elongation is set to NotKnown

# PMMA.DielectricString is set to High

# PMMA.DielectricStrength is set to 450.0

# PMMA.DetailWin is set to Detail.WinPMMA

# PMMA.DensityString is set to Heavy

# PMMA.Density is set to 73.5

# PMMA.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali

# PFA.TypicalProduct is set to Electronic product

# PFA.TensileStrengthString is set to Low

# PFA.TensileStrength is set to 4.5

# PFA.TemperatureMelting is set to 577.0

# PFA.TemperatureGlassMin is set to 78.0

# PFA.TemperatureGlassMax is set to 112.0

# PFA.OutdoorWeather is set to Excellent

# PFA.Name is set to Perfluor alkoxy (PFA)

# PFA.ImpactString is set to NotKnown

# PFA.ImpactStrength is set to NotKnown

# PFA.FDA is set to Yes

# PFA.Elongation is set to 30.0

# PFA.DielectricString is set to VeryHigh

# PFA.DielectricStrength is set to 2560.0

# PFA.DetailWin is set to Detail.WinPFA

# PFA.DensityString is set to Heavy

# PFA.Density is set to 133.0

# PFA.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali,  
Ketone, Chlorinated\_Solvent, Alcohol

# PET.TensileStrengthString is set to High

# PET.TensileStrength is set to 7.1  
# PET.TemperatureMelting is set to -99999.0  
# PET.TemperatureGlassMin is set to 178.0  
# PET.TemperatureGlassMax is set to 178.0  
# PET.OutdoorWeather is set to Poor  
# PET.Name is set to Polyethylene terephthalate (PET)  
# PET.ImpactString is set to Low  
# PET.ImpactStrength is set to 1.7  
# PET.FDA is set to Yes  
# PET.Elongation is set to 180.0  
# PET.DielectricString is set to High  
# PET.DielectricStrength is set to 400.0  
# PET.DetailWin is set to Detail.WinPET  
# PET.DensityString is set to Heavy  
# PET.Density is set to 79.2  
# PET.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Ketone, Chlorinated\_Solvent,  
Alcohol  
# PEEK.TensileStrengthString is set to Low  
# PEEK.TensileStrength is set to 13.3  
# PEEK.TemperatureMelting is set to 635.0  
# PEEK.TemperatureGlassMin is set to 293.0  
# PEEK.TemperatureGlassMax is set to 293.0  
# PEEK.OutdoorWeather is set to Good  
# PEEK.Name is set to Polyetheretherketone (PEEK)  
# PEEK.ImpactString is set to Low  
# PEEK.ImpactStrength is set to 1.55  
# PEEK.FDA is set to NotKnown  
# PEEK.Elongation is set to 50.0

# PEEK.DielectricString is set to High

# PEEK.DielectricStrength is set to 480.0

# PEEK.DetailWin is set to Detail.WinPEEK

# PEEK.DensityString is set to Heavy

# PEEK.Density is set to 82.4

# PEEK.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Ketone,  
Chlorinated\_Solvent, Alcohol

# PCTFE.TypicalProduct is set to Electronic product, Electrical product, Medical  
instrumentation, Cryogenic seals, Gaskets

# PCTFE.TensileStrengthString is set to High

# PCTFE.TensileStrength is set to 5.73

# PCTFE.TemperatureMelting is set to 413.0

# PCTFE.TemperatureGlassMin is set to 131.0

# PCTFE.TemperatureGlassMax is set to 131.0

# PCTFE.OutdoorWeather is set to Excellent

# PCTFE.Name is set to Polychlorotrifluoroethylene (PCTFE)

# PCTFE.ImpactString is set to High

# PCTFE.ImpactStrength is set to 5.0

# PCTFE.FDA is set to Yes

# PCTFE.Elongation is set to 5.0

# PCTFE.DielectricString is set to VeryHigh

# PCTFE.DielectricStrength is set to 2580.0

# PCTFE.DetailWin is set to Detail.WinPCTFE

# PCTFE.DensityString is set to Heavy

# PCTFE.Density is set to 133.0

# PCTFE.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali,  
Strong\_Alkali, Alcohol

# PC.TypicalProduct is set to Automotive, Glazing applications, Electronics, Business machines, Lighting, Vacuum sweepers, Mixers, Power tools, Compact disk, Lenses, Medical products, Safety glasses, Bottles, Ovenware, Beer mugs and pitchers, Tableware, Food storage containers

# PC.Transparency is set to YES

# PC.TensileStrengthString is set to High

# PC.TensileStrength is set to 9.0

# PC.TemperatureMelting is set to 302.0

# PC.TemperatureGlassMin is set to 99999.0

# PC.TemperatureGlassMax is set to -99999.0

# PC.OutdoorWeather is set to NotKnown

# PC.Name is set to Polycarbonate (PC)

# PC.ImpactString is set to Medium

# PC.ImpactStrength is set to 2.3

# PC.FDA is set to NotKnown

# PC.Elongation is set to 110.0

# PC.DielectricString is set to Medium

# PC.DielectricStrength is set to 380.0

# PC.DetailWin is set to Detail.WinPC

# PC.DensityString is set to Heavy

# PC.Density is set to 74.8

# PC.CompressiveStrength is set to 1.0

# PC.ChemicalResistance is set to NotKnown

# PBT.TensileStrengthString is set to High

# PBT.TensileStrength is set to 8.0

# PBT.TemperatureMelting is set to 437.0

# PBT.TemperatureGlassMin is set to 104.0

# PBT.TemperatureGlassMax is set to 104.0

# PBT.OutdoorWeather is set to Good

# PBT.Name is set to Polybutylene terephthalate (PBT)

# PBT.ImpactString is set to Low

# PBT.ImpactStrength is set to 1.0

# PBT.FDA is set to Yes

# PBT.Elongation is set to NotKnown

# PBT.DielectricStrength is set to 400.0

# PBT.DetailWin is set to Detail.WinPBT

# PBT.DensityString is set to Heavy

# PBT.Density is set to 81.7

# PBT.ChemicalResistance is set to Weak\_Acid, Strong\_Acid

# Nylon6\_6.TypicalProduct is set to Non-lubricated gears, Bearings, Anti-friction parts, Snap fits, Detents, Spring loading, Painted autobody parts, Electrical parts, Speedometer and windshield wiper gears, Wire harness clips and fasteners, Connectors, Emission canisters, Fluid reservoir

# Nylon6\_6.TensileStrengthString is set to High

# Nylon6\_6.TensileStrength is set to 13.05

# Nylon6\_6.TemperatureMelting is set to 491.0

# Nylon6\_6.TemperatureGlassMin is set to 99999.0

# Nylon6\_6.TemperatureGlassMax is set to -99999.0

# Nylon6\_6.OutdoorWeather is set to NotKnown

# Nylon6\_6.Name is set to Nylon 6\_6

# Nylon6\_6.ImpactString is set to Low

# Nylon6\_6.ImpactStrength is set to 0.7

# Nylon6\_6.FDA is set to NotKnown

# Nylon6\_6.Elongation is set to 20.0

# Nylon6\_6.DielectricString is set to VeryHigh

# Nylon6\_6.DielectricStrength is set to 600.0

# Nylon6\_6.DetailWin is set to Detail.WinNylon

# Nylon6\_6.DensityString is set to Heavy

# Nylon6\_6.Density is set to 71.1

# Nylon6\_6.ChemicalResistance is set to Weak\_Alkali, Strong\_Alkali, Ketone,  
Chlorinated\_Solvent, Alcohol

# Nylon6.TypicalProduct is set to Non-lubricated gears, Bearings, Anti-friction parts, Snap  
fits, Detents, Spring loading, Painted autobody parts, Electrical parts, Speedometer and  
windshield wiper gears, Wire harness clips and fasteners, Connectors, Emission canisters,  
Fluid reservoir

# Nylon6.Transparency is set to NO

# Nylon6.TensileStrengthString is set to High

# Nylon6.TensileStrength is set to 11.6

# Nylon6.TemperatureMelting is set to 428.0

# Nylon6.TemperatureGlassMin is set to 99999.0

# Nylon6.TemperatureGlassMax is set to -99999.0

# Nylon6.OutdoorWeather is set to NotKnown

# Nylon6.Name is set to Nylon6

# Nylon6.ImpactString is set to Low

# Nylon6.ImpactStrength is set to 1.0

# Nylon6.FDA is set to NotKnown

# Nylon6.Elongation is set to 75.0

# Nylon6.DielectricString is set to VeryHigh

# Nylon6.DielectricStrength is set to 400.0

# Nylon6.DetailWin is set to Detail.WinNylon

# Nylon6.DensityString is set to Heavy

# Nylon6.Density is set to 70.4

# Nylon6.CompressiveStrength is set to 12.82

# Nylon6.ChemicalResistance is set to Weak\_Alkali, Strong\_Alkali, Ketone,  
Chlorinated\_Solvent, Alcohol

# LLDPE.TensileStrengthString is set to Low

# LLDPE.TensileStrength is set to 2.5

# LLDPE.TemperatureMelting is set to 257.0

# LLDPE.TemperatureGlassMin is set to -202.0

# LLDPE.TemperatureGlassMax is set to -202.0

# LLDPE.OutdoorWeather is set to NotKnown

# LLDPE.Name is set to Linear Low-Density Polyethylene (LLDPE)

# LLDPE.ImpactString is set to NotKnown

# LLDPE.ImpactStrength is set to NotKnown

# LLDPE.FDA is set to Yes

# LLDPE.Elongation is set to 700.0

# LLDPE.DielectricString is set to NotKnown

# LLDPE.DielectricStrength is set to NotKnown

# LLDPE.DetailWin is set to Detail.WinLLDPE

# LLDPE.DensityString is set to Light

# LLDPE.Density is set to 57.15

# LLDPE.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Ketone,  
Chlorinated\_Solvent, Alcohol

# LDPE.TypicalProduct is set to Packaging, Disposable diapers, Agricultural film, Shrink  
film, Paper products, Tapes, Milk cartons, Bottles, Wire coating, Cable coating

# LDPE.Transparency is set to NO

# LDPE.TensileStrengthString is set to Low

# LDPE.TensileStrength is set to 1.75

# LDPE.TemperatureMelting is set to 228.5

# LDPE.TemperatureGlassMin is set to -195.0

# LDPE.TemperatureGlassMax is set to -195.0



# LDPE.OutdoorWeather is set to Poor

# LDPE.Name is set to Low-Density Polyethylene (LDPE)

# LDPE.ImpactString is set to NotKnown

# LDPE.ImpactStrength is set to NotKnown

# LDPE.FDA is set to Yes

# LDPE.Elongation is set to 400.0

# LDPE.DielectricString is set to High

# LDPE.DielectricStrength is set to 480.0

# LDPE.DetailWin is set to Detail.WinLDPE

# LDPE.DensityString is set to Light

# LDPE.Density is set to 57.65

# LDPE.CompressiveStrength is set to 2.0

# LDPE.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Alcohol

# HDPE.TensileStrengthString is set to Low

# HDPE.TensileStrength is set to 3.55

# HDPE.TemperatureMelting is set to NotKnown

# HDPE.TemperatureGlassMin is set to NotKnown

# HDPE.TemperatureGlassMax is set to NotKnown

# HDPE.OutdoorWeather is set to NotKnown

# HDPE.Name is set to High-Density Polyethylene (HDPE)

# HDPE.ImpactString is set to Low

# HDPE.ImpactStrength is set to 1.75

# HDPE.FDA is set to Yes

# HDPE.Elongation is set to 550.0

# HDPE.DielectricString is set to VeryHigh

# HDPE.DielectricStrength is set to 500.0

# HDPE.DetailWin is set to Detail.WinHDPE

# HDPE.DensityString is set to Light

# HDPE.Density is set to 59.5

# HDPE.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Alcohol

# FEP.TypicalProduct is set to Gaskets, Seals, Tank liners, Valves, Piping, Fittings, Wire, Cable, Electrical product

# FEP.TensileStrengthString is set to Low

# FEP.TensileStrength is set to 3.05

# FEP.TemperatureMelting is set to 527.0

# FEP.TemperatureGlassMin is set to -148.0

# FEP.TemperatureGlassMax is set to -148.0

# FEP.OutdoorWeather is set to Excellent

# FEP.Name is set to Fluorocarbon (FEP)

# FEP.ImpactString is set to NotKnown

# FEP.ImpactStrength is set to NotKnown

# FEP.FDA is set to Yes

# FEP.Elongation is set to 35.0

# FEP.DielectricString is set to VeryHigh

# FEP.DielectricStrength is set to 1300.0

# FEP.DetailWin is set to Detail.WinFEP

# FEP.DensityString is set to Heavy

# FEP.Density is set to 134.0

# FEP.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali, Ketone, Chlorinated\_Solvent, Alcohol

# EVA.TypicalProduct is set to Wire, Cable, Toys, Athletic goods, Bearing pads, Gaskets, Automotive parts

# EVA.TensileStrengthString is set to Low

# EVA.TensileStrength is set to 2.45

# EVA.TemperatureMelting is set to NotKnown

# EVA.TemperatureGlassMin is set to NotKnown

# EVA.TemperatureGlassMax is set to NotKnown  
# EVA.OutdoorWeather is set to NotKnown  
# EVA.Name is set to Ethylene Vinyl Acetate (EVA)  
# EVA.ImpactString is set to NotKnown  
# EVA.ImpactStrength is set to NotKnown  
# EVA.FDA is set to Yes  
# EVA.Elongation is set to 800.0  
# EVA.DielectricString is set to NotKnown  
# EVA.DielectricStrength is set to NotKnown  
# EVA.DetailWin is set to Detail.WinEVA  
# EVA.DensityString is set to Light  
# EVA.Density is set to 59.0  
# EVA.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali, Alcohol  
# ETFE.TypicalProduct is set to Wire, Cable, Wristwash cases  
# ETFE.TensileStrengthString is set to High  
# ETFE.TensileStrength is set to 6.97  
# ETFE.TemperatureMelting is set to 518.0  
# ETFE.TemperatureGlassMin is set to -184.0  
# ETFE.TemperatureGlassMax is set to 230.0  
# ETFE.OutdoorWeather is set to Excellent  
# ETFE.Name is set to Ethylene-Tetrafluoroethylene Copolymer (ETFE)  
# ETFE.ImpactString is set to NotKnown  
# ETFE.ImpactStrength is set to NotKnown  
# ETFE.FDA is set to No  
# ETFE.Elongation is set to NotKnown  
# ETFE.DielectricString is set to VeryHigh  
# ETFE.DielectricStrength is set to 1500.0  
# ETFE.DetailWin is set to Detail.WinETFE

# ETFE.DensityString is set to Heavy

# ETFE.Density is set to 106.0

# ETFE.ChemicalResistance is set to Weak\_Acid, Strong\_Acid, Weak\_Alkali, Strong\_Alkali, Ketone, Chlorinated\_Solvent, Alcohol

# DAP.TypicalProduct is set to Connector, Potentiometer housings, Switches, Relays, Circuit breakers, Terminal strips, Coil bobbins

# DAP.TensileStrengthString is set to High

# DAP.TensileStrength is set to 8.0

# DAP.TemperatureMelting is set to -99999.0

# DAP.TemperatureGlassMin is set to 320.0

# DAP.TemperatureGlassMax is set to 330.0

# DAP.OutdoorWeather is set to NotKnown

# DAP.Name is set to Diallyl orthophthalate (DAP)

# DAP.ImpactString is set to Low

# DAP.ImpactStrength is set to 0.6

# DAP.FDA is set to NotKnown

# DAP.Elongation is set to 4.0

# DAP.DielectricString is set to High

# DAP.DielectricStrength is set to 400.0

# DAP.DetailWin is set to WinDAP

# DAP.DensityString is set to Heavy

# DAP.Density is set to 112.0

# DAP.ChemicalResistance is set to Weak Acid, Strong Acid, Strong Alkali, Weak Alkali, Alcohol, Ketone

# CPE.TypicalProduct is set to Automotive hose, Tubing, Wire jacketing, Single-ply roofing membranes, Industrial hoses, Mining cable jacketing, Gaskets, Seals, Tank liners, Wire, Cable, Weather fabrics, Waterproofing fabrics

# CPE.TensileStrengthString is set to Low

# CPE.TensileStrength is set to 1.85  
# CPE.TemperatureMelting is set to -99999.0  
# CPE.TemperatureGlassMin is set to -5.0  
# CPE.TemperatureGlassMax is set to -5.0  
# CPE.OutdoorWeather is set to NotKnown  
# CPE.Name is set to Chlorinated Polyethylene (CPE)  
# CPE.ImpactString is set to NotKnown  
# CPE.ImpactStrength is set to NotKnown  
# CPE.FDA is set to NotKnown  
# CPE.Elongation is set to 600.0  
# CPE.DielectricString is set to Medium  
# CPE.DielectricStrength is set to 437.5  
# CPE.DetailWin is set to Detail.WinCPE  
# CPE.DensityString is set to Heavy  
# CPE.Density is set to 76.35  
# CPE.ChemicalResistance is set to Weak\_Alkali, Alcohol  
# CAP.TypicalProduct is set to Toothbrush handles, Packaging containers, Medical devices,  
Safety glasses, Steering wheels, Cosmetic parts, Toys  
# CAP.TensileStrengthString is set to High  
# CAP.TensileStrength is set to 5.08  
# CAP.TemperatureMelting is set to NotKnown  
# CAP.TemperatureGlassMin is set to NotKnown  
# CAP.TemperatureGlassMax is set to NotKnown  
# CAP.Name is set to Cellulose Acetate Propionate (CAP)  
# CAP.ImpactString is set to High  
# CAP.ImpactStrength is set to 7.7  
# CAP.FDA is set to Yes  
# CAP.Elongation is set to 60.0

# CAP.DielectricString is set to Medium  
# CAP.DielectricStrength is set to 340.0  
# CAP.DetailWin is set to Detail.WinCAP  
# CAP.DensityString is set to Heavy  
# CAP.Density is set to 74.2  
# CAP.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Alcohol  
# CAB.TypicalProduct is set to Toys, Skylights, Pens, Signs, Ski goggles, Automobile trim  
# CAB.TemperatureMelting is set to NotKnown  
# CAB.TemperatureGlassMin is set to NotKnown  
# CAB.TemperatureGlassMax is set to NotKnown  
# CAB.OutdoorWeather is set to NotKnown  
# CAB.Name is set to Cellulose Acetate Butyrare (CAB)  
# CAB.ImpactString is set to Medium  
# CAB.ImpactStrength is set to 3.5  
# CAB.FDA is set to Yes  
# CAB.Elongation is set to 50.0  
# CAB.DielectricString is set to Medium  
# CAB.DielectricStrength is set to 340.0  
# CAB.DetailWin is set to Detail.WinCAB  
# CAB.DensityString is set to Heavy  
# CAB.Density is set to 74.3  
# CAB.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Alcohol  
# CA.TypicalProduct is set to Toys, Opticals, Handles, Sheeting  
# CA.TensileStrengthString is set to High  
# CA.TensileStrength is set to 5.8  
# CA.TemperatureMelting is set to NotKnown  
# CA.TemperatureGlassMin is set to NotKnown  
# CA.TemperatureGlassMax is set to NotKnown

# CA.OutdoorWeather is set to NotKnown  
# CA.Name is set to Cellulose Acetate (CA)  
# CA.ImpactString is set to Medium  
# CA.ImpactStrength is set to 3.0  
# CA.FDA is set to Yes  
# CA.Elongation is set to NotKnown  
# CA.DielectricString is set to Medium  
# CA.DielectricStrength is set to 340.0  
# CA.DetailWin is set to Detail.WinCA  
# CA.DensityString is set to Heavy  
# CA.Density is set to 79.8  
# CA.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Alcohol  
# Acetal\_Homopolymer.TypicalProduct is set to Counter-top appliances, Gears, Cams,  
Bearings, Chain links, Springs, Valves, Fitting, Cooling fans, Trim clips, Exterior door pull,  
Mirrior housing, Computer keyboards, Telephones, Water-meter housing, Toys, Tool holders,  
Pop-up sprinklers  
# Acetal\_Homopolymer.TensileStrengthString is set to High  
# Acetal\_Homopolymer.TensileStrength is set to 10.0  
# Acetal\_Homopolymer.TemperatureMelting is set to 347.0  
# Acetal\_Homopolymer.TemperatureGlassMin is set to 99999.0  
# Acetal\_Homopolymer.TemperatureGlassMax is set to -99999.0  
# Acetal\_Homopolymer.OutdoorWeather is set to NotKnown  
# Acetal\_Homopolymer.Name is set to Acetal Homopolymer  
# Acetal\_Homopolymer.ImpactString is set to Low  
# Acetal\_Homopolymer.ImpactStrength is set to 1.8  
# Acetal\_Homopolymer.FDA is set to Yes  
# Acetal\_Homopolymer.Elongation is set to 50.0  
# Acetal\_Homopolymer.DielectricString is set to VeryHigh

# Acetal\_Homopolymer.DielectricStrength is set to 500.0

# Acetal\_Homopolymer.DetailWin is set to Detail.WinAcetal

# Acetal\_Homopolymer.DensityString is set to Heavy

# Acetal\_Homopolymer.Density is set to 86.0

# Acetal\_Homopolymer.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali,  
Strong\_Alkali, Ketone, Chlorinated\_Solvent, Alcohol

# Acetal\_Copolymer.TypicalProduct is set to Counter-top appliances, Gears, Cams, Bearings,  
Chain links, Springs, Valves, Fitting, Cooling fans, Trim clips, Exterior door pull, Mirrior  
housing, Computer keyboards, Telephones, Water-meter housing, Toys, Tool holders, Pop-up  
sprinklers

# Acetal\_Copolymer.TensileStrengthString is set to High

# Acetal\_Copolymer.TensileStrength is set to 8.8

# Acetal\_Copolymer.TemperatureMelting is set to 329.0

# Acetal\_Copolymer.TemperatureGlassMin is set to 99999.0

# Acetal\_Copolymer.TemperatureGlassMax is set to -99999.0

# Acetal\_Copolymer.OutdoorWeather is set to NotKnown

# Acetal\_Copolymer.Name is set to Acetal Copolymer

# Acetal\_Copolymer.ImpactString is set to Low

# Acetal\_Copolymer.ImpactStrength is set to 1.25

# Acetal\_Copolymer.FDA is set to Yes

# Acetal\_Copolymer.Elongation is set to 57.5

# Acetal\_Copolymer.DielectricString is set to VeryHigh

# Acetal\_Copolymer.DielectricStrength is set to 500.0

# Acetal\_Copolymer.DetailWin is set to Detail.WinAcetal

# Acetal\_Copolymer.DensityString is set to Heavy

# Acetal\_Copolymer.Density is set to 88.0

# Acetal\_Copolymer.ChemicalResistance is set to Weak\_Acid, Weak\_Alkali, Strong\_Alkali,  
Ketone, Chlorinated\_Solvent, Alcohol



# ABS\_MediumImpact.TypicalProduct is set to Boat hulls, Toys, Luggage, Furniture, Telephones, DWV pipe and fitting, Roof ventilators, Knobs, Mirrior housing, Wheel covers, Decorative trim, Grilles, Light housings, Instrument panels, Mixers, Refrigerator door, Tank liners, Vacuum sweepers

# ABS\_MediumImpact.TensileStrengthString is set to High

# ABS\_MediumImpact.TensileStrength is set to 5.9

# ABS\_MediumImpact.TemperatureMelting is set to -99999.0

# ABS\_MediumImpact.TemperatureGlassMin is set to 221.0

# ABS\_MediumImpact.TemperatureGlassMax is set to 239.0

# ABS\_MediumImpact.OutdoorWeather is set to Fair

# ABS\_MediumImpact.Name is set to Acrylonitrile-Butadiene-Styrene (ABS Medium Impact)

# ABS\_MediumImpact.ImpactString is set to Medium

# ABS\_MediumImpact.ImpactStrength is set to 4.25

# ABS\_MediumImpact.FDA is set to Yes

# ABS\_MediumImpact.Elongation is set to 2.9

# ABS\_MediumImpact.DielectricString is set to VeryHigh

# ABS\_MediumImpact.DielectricStrength is set to 600.0

# ABS\_MediumImpact.DetailWin is set to Detail.WinABS

# ABS\_MediumImpact.DensityString is set to Heavy

# ABS\_MediumImpact.Density is set to 65.15

# ABS\_MediumImpact.ChemicalResistance is set to NotKnown

# ABS\_HighImpact.TypicalProduct is set to Boat hulls, Toys, Luggage, Furniture, Telephones, DWV pipe and fitting, Roof ventilators, Knobs, Mirrior housing, Wheel covers, Decorative trim, Grilles, Light housings, Instrument panels, Mixers, Refrigerator door, Tank liners, Vacuum sweepers

# ABS\_HighImpact.Transparency is set to YES

# ABS\_HighImpact.TensileStrengthString is set to High

# ABS\_HighImpact.TensileStrength is set to 5.55

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# ABS_HighImpact.TemperatureMelting is set to -99999.0
# ABS_HighImpact.TemperatureGlassMin is set to 212.0
# ABS_HighImpact.TemperatureGlassMax is set to 239.0
# ABS_HighImpact.OutdoorWeather is set to Fair
# ABS_HighImpact.Name is set to Acrylonitrile-Butadiene-Styrene (ABS High Impact)
# ABS_HighImpact.ImpactString is set to High
# ABS_HighImpact.ImpactStrength is set to 8.25
# ABS_HighImpact.FDA is set to Yes
# ABS_HighImpact.Elongation is set to 3.15
# ABS_HighImpact.DielectricString is set to VeryHigh
# ABS_HighImpact.DielectricStrength is set to 600.0
# ABS_HighImpact.DetailWin is set to Detail.WinABS
# ABS_HighImpact.DensityString is set to Heavy
# ABS_HighImpact.Density is set to 63.85
# ABS_HighImpact.CompressiveStrength is set to 6.41
# ABS_HighImpact.ChemicalResistance is set to NotKnown
# Polyamide.TypicalProduct is set to Non-lubricated gears, Bearings, Anti-friction parts, Snap
fits, Detents, Spring loading, Painted autobody parts, Electrical parts, Speedometer and
windshield wiper gears, Wire harness clips and fasteners, Connectors, Emission canisters,
Fluid reservior
# NOIR: Executing script for event APPSTARTUP for resource Script Application Object
# NOIR: called verb NOIR_LoadKB with arguments: pls0901.kb
# NOIR: verb NOIR_LoadKB returns pointer 0x50670102
# NOIR: called verb RLIB_LoadFile with arguments: psa.dat
# NOIR: verb RLIB_LoadFile returns pointer 0x59c7009a
# NOIR: called verb WIN_OpenByName with arguments: START.win1
# NOIR: Executing script for event WIN_OPENED for resource Start.Win1
# NOIR: called verb WIN_Maximize with arguments: 0x6287080a
```

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x6287080a  
# NOIR: verb WIN\_OpenByName returns pointer 0x6287080a  
# NOIR: Executing script for event TBUT\_HIT for resource Start.Win1.PBut1  
# NOIR: called verb WGT\_GetWin with arguments: 0x629f060c  
# NOIR: verb WGT\_GetWin returns pointer 0x6287080a  
# NOIR: called verb WIN\_Terminate with arguments: 0x6287080a  
# NOIR: called verb WIN\_OpenByName with arguments: Intro.win1  
# NOIR: Executing script for event WIN\_OPENED for resource Intro.Win1  
# NOIR: called verb WIN\_Maximize with arguments: 0x628709a2  
# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x628709a2  
# NOIR: verb WIN\_OpenByName returns pointer 0x628709a2  
# NOIR: Executing script for event TBUT\_HIT for resource Intro.Win1.PBut4  
# NOIR: called verb WGT\_GetWin with arguments: 0x629f040e  
# NOIR: verb WGT\_GetWin returns pointer 0x628709a2  
# NOIR: called verb WIN\_Terminate with arguments: 0x628709a2  
# NOIR: called verb NOIR\_GetAtomId with arguments: FIRST\_START, 512  
# NOIR: verb NOIR\_GetAtomId returns pointer 0x5e8f081a  
# NOIR: called verb NOIR\_Suggest with arguments: 0x5e8f081a, 1  
# Suggesting FIRST\_START  
# NOIR: verb NOIR\_Suggest returns integer 1  
# NOIR: called verb NOIR\_Knowcass  
# Invoking method OrderOfSources attached to <System> instantiated for FIRST\_START  
# Invoking method OrderOfSources attached to <System> instantiated for |Product|.TypicalA  
# NOIR: Executing script for event INITIALIZE for resource Inform.Win1.Panel1.LBox2  
# NOIR: called verb NOIR\_GetAtomId with arguments: PrePlastics, 1  
# NOIR: verb NOIR\_GetAtomId returns pointer 0x601708d2  
# NOIR: called verb NOIR\_LinkListBox with arguments: 0x633f060c, 0x601708d2, 1

```
# NOIR: called verb NOIR_InitializeListBox with arguments: 0x633f060c, Name;,
Recommended Plastics;, 3, FirstSelect;TRUE;FALSE;
# NOIR: Executing script for event WIN_OPENED for resource Inform.Win1
# NOIR: called verb WIN_Maximize with arguments: 0x62870e6a
# NOIR: called verb NOIR_UpdateWgt with arguments: 0x62870e6a
# NOIR: Executing script for event NOIR_STARTQUESTION for resource
Inform.Win1.Panel2.CBox2
# NOIR: called verb WGT_Enable with arguments: 0x62c701f2
# NOIR: called verb NOIR_GetQuestionSlotId
# NOIR: verb NOIR_GetQuestionSlotId returns pointer 0x5ff70bee
# NOIR: called verb NOIR_CBoxSetSlotChoices with arguments: 0x62c701f2, 0x5ff70bee
# NOIR: Executing script for event CBOX_ITEMSELECTED for resource
Inform.Win1.Panel2.CBox2
# NOIR: called verb NOIR_GetQuestionSlotId
# NOIR: verb NOIR_GetQuestionSlotId returns pointer 0x5ff70bee
# NOIR: called verb CBOX_ChosenGetLabel with arguments: 0x62c701f2
# NOIR: verb CBOX_ChosenGetLabel returns string Appliances
# NOIR: called verb NOIR_Volunteer with arguments: 0x5ff70bee, 5, Appliances, 1
# NOIR: verb NOIR_Volunteer returns integer 1
# NOIR: Executing script for event NOIR_STARTQUESTION for resource
Inform.Win1.Panel2.PromptLineInput2
# NOIR: called verb NOIR_GetQuestionPrompt
# NOIR: verb NOIR_GetQuestionPrompt returns string Please select product type from the list
below, if you do not find it from the list please push the NEXT botton.
# NOIR: called verb TED_SetStr with arguments: 0x096f01aa, Please select product type from
the list below, if you do not find it from the list please push the NEXT botton.
# Product.TypicalA is set to Appliances
# NOIR: verb NOIR_Knowcress returns integer 1
```

```

# NOIR: Executing script for event CBOX_ITEMSELECTED for resource
Inform.Win1.Panel2.CBox2
# NOIR: called verb NOIR_GetQuestionSlotId
# NOIR: verb NOIR_GetQuestionSlotId returns pointer 0x5ff70bee
# NOIR: called verb CBOX_ChosenGetLabel with arguments: 0x62c701f2
# NOIR: verb CBOX_ChosenGetLabel returns string Consumer Applications
# NOIR: called verb NOIR_Volunteer with arguments: 0x5ff70bee, 5, Consumer Applications,
1
# NOIR: verb NOIR_Volunteer returns integer 1
# NOIR: Executing script for event TBUT_HIT for resource Inform.Win1.Panel2.PBut3
# NOIR: called verb NOIR_Knowcass
# NOIR: Executing script for event NOIR_ENDQUESTION for resource
Inform.Win1.Panel2.CBox2
# NOIR: called verb WGT_Disable with arguments: 0x62c701f2
# NOIR: Executing script for event NOIR_ENDQUESTION for resource
Inform.Win1.Panel2.PromptLineInput2
# NOIR: called verb TED_SetStr with arguments: 0x096f01aa,
# NOIR: called verb WGT_Disable with arguments: 0x096f01aa
# NOIR: Executing script for event NOIR_ENDQUESTION for resource
Inform.Win1.Panel1.MTEd1
# NOIR: called verb NOIR_GetAtomId with arguments: Product.Typical, 4
# NOIR: verb NOIR_GetAtomId returns pointer 0x5ff70ba8
# NOIR: called verb NOIR_LinkTextEdit with arguments: 0x096f0012, 0x5ff70ba8, 1
# NOIR: Executing script for event NOIR_ATOMUPDATED for resource
Inform.Win1.Panel1.MTEd1
# NOIR: called verb NOIR_UpdateWgt with arguments: 0x096f0012
# NOIR: called verb NOIR_TranslateStr with arguments: Plastics Preselection for Producing
@V(Product.Typical), 0

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# NOIR: verb NOIR\_TranslateStr returns string Plastics Preselection for Producing Unknown

# NOIR: called verb TED\_SetStr with arguments: 0x096f0012, Plastics Preselection for Producing Unknown

# NOIR: called verb NOIR\_TranslateStr with arguments: Plastics Preselection for Producing @V(Product.Typical), 0

# NOIR: verb NOIR\_TranslateStr returns string Plastics Preselection for Producing Unknown

# NOIR: called verb TED\_SetStr with arguments: 0x096f0012, Plastics Preselection for Producing Unknown

# NOIR: Executing script for event NOIR\_ENDQUESTION for resource Inform.Win1.MTEd2

# NOIR: called verb WGT\_Disable with arguments: 0x6287080a

# NOIR: called verb NOIR\_GetAtomId with arguments: Product.Typical, 4

# NOIR: verb NOIR\_GetAtomId returns pointer 0x5ff70ba8

# NOIR: called verb NOIR\_LinkTextEdit with arguments: 0x6287080a, 0x5ff70ba8, 1

# NOIR: Executing script for event NOIR\_ATOMUPDATED for resource Inform.Win1.MTEd2

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x6287080a

# NOIR: called verb NOIR\_TranslateStr with arguments: Are you satisfied these plastic resins for producing @V(Product.Typical)? If you want to choose new plastic resins in addition to these you should know something about product specification., 0

# NOIR: verb NOIR\_TranslateStr returns string Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb TED\_SetStr with arguments: 0x6287080a, Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb NOIR\_TranslateStr with arguments: Are you satisfied these plastic resins for producing @V(Product.Typical)? If you want to choose new plastic resins in addition to these you should know something about product specification., 0

# NOIR: verb NOIR\_TranslateStr returns string Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb TED\_SetStr with arguments: 0x6287080a, Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# Product.TypicalA is set to Consumer Applications

# Condition |Product|.TypicalA is precisely equal to "Appliances","Industrial","Automotive","Material Handling","Electrical and Electronics","Plumbing","Consumer Applications","Hardware","Irrigation and Agricultural","Building and Construction" in Rule Information1. (True).

# Rule Information1 is set to true

# FIRST\_START is set to True

# Invoking method OrderOfSources attached to <System> instantiated for ApplicationSelect

# Rule Information11 is set to false

# Rule Information13 is set to false

# Rule Information15 is set to false

# Rule Information16 is set to false

# Rule Information17 is set to false

# Rule Information20 is set to false

# Rule Information4\_\_2 is set to false

# Rule Information6 is set to false

# Condition |Product|.TypicalA is precisely equal to "Consumer Applications" in Rule Information9. (True).

# Rule Information9 is set to true

```

# ApplicationSelect is set to True

# Invoking method OrderOfSources attached to <System> instantiated for ConsumerSelect

# Invoking method OrderOfSources attached to <System> instantiated for |Product|.TypicalJ

# NOIR: Executing script for event NOIR_STARTQUESTION for resource
Inform.Win1.Panel2.CBox2

# NOIR: called verb WGT_Enable with arguments: 0x62c701f2

# NOIR: called verb NOIR_GetQuestionSlotId

# NOIR: verb NOIR_GetQuestionSlotId returns pointer 0x5fef020c

# NOIR: called verb NOIR_CBoxSetSlotChoices with arguments: 0x62c701f2, 0x5fef020c

# NOIR: Executing script for event CBOX_ITEMSELECTED for resource
Inform.Win1.Panel2.CBox2

# NOIR: called verb NOIR_GetQuestionSlotId

# NOIR: verb NOIR_GetQuestionSlotId returns pointer 0x5fef020c

# NOIR: called verb CBOX_ChosenGetLabel with arguments: 0x62c701f2

# NOIR: verb CBOX_ChosenGetLabel returns string Bearing pads

# NOIR: called verb NOIR_Volunteer with arguments: 0x5fef020c, 5, Bearing pads, 1

# NOIR: verb NOIR_Volunteer returns integer 1

# NOIR: Executing script for event NOIR_STARTQUESTION for resource
Inform.Win1.Panel2.PromptLineInput2

# NOIR: called verb NOIR_GetQuestionPrompt

# NOIR: verb NOIR_GetQuestionPrompt returns string Please select product type from the list
below, if you do not find it from the list please push the NEXT botton.

# NOIR: called verb TED_SetStr with arguments: 0x096f01aa, Please select product type from
the list below, if you do not find it from the list please push the NEXT botton.

# Product.TypicalJ is set to Bearing pads

# NOIR: verb NOIR_Knowcess returns integer 1

# NOIR: Executing script for event CBOX_ITEMSELECTED for resource
Inform.Win1.Panel2.CBox2

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# NOIR: called verb NOIR\_GetQuestionSlotId

# NOIR: verb NOIR\_GetQuestionSlotId returns pointer 0x5fef020c

# NOIR: called verb CBOX\_ChosenGetLabel with arguments: 0x62c701f2

# NOIR: verb CBOX\_ChosenGetLabel returns string Toys

# NOIR: called verb NOIR\_Volunteer with arguments: 0x5fef020c, 5, Toys, 1

# NOIR: verb NOIR\_Volunteer returns integer 1

# NOIR: Executing script for event TBUT\_HIT for resource Inform.Win1.Panel2.PBut3

# NOIR: called verb NOIR\_Knowcass

# NOIR: Executing script for event NOIR\_ENDQUESTION for resource Inform.Win1.Panel2.CBox2

# NOIR: called verb WGT\_Disable with arguments: 0x62c701f2

# NOIR: Executing script for event NOIR\_ENDQUESTION for resource Inform.Win1.Panel2.PromptLineInput2

# NOIR: called verb TED\_SetStr with arguments: 0x096f01aa,

# NOIR: called verb WGT\_Disable with arguments: 0x096f01aa

# NOIR: Executing script for event NOIR\_ENDQUESTION for resource Inform.Win1.Panel1.MTEd1

# NOIR: called verb NOIR\_GetAtomId with arguments: Product.Typical, 4

# NOIR: verb NOIR\_GetAtomId returns pointer 0x5ff70ba8

# NOIR: called verb NOIR\_LinkTextEdit with arguments: 0x096f0012, 0x5ff70ba8, 1

# NOIR: Executing script for event NOIR\_ATOMUPDATED for resource Inform.Win1.Panel1.MTEd1

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x096f0012

# NOIR: called verb NOIR\_TranslateStr with arguments: Plastics Preselection for Producing @V(Product.Typical), 0

# NOIR: verb NOIR\_TranslateStr returns string Plastics Preselection for Producing Unknown

# NOIR: called verb TED\_SetStr with arguments: 0x096f0012, Plastics Preselection for Producing Unknown

# NOIR: called verb NOIR\_TranslateStr with arguments: Plastics Preselection for Producing @V(Product.Typical), 0

# NOIR: verb NOIR\_TranslateStr returns string Plastics Preselection for Producing Unknown

# NOIR: called verb TED\_SetStr with arguments: 0x096f0012, Plastics Preselection for Producing Unknown

# NOIR: Executing script for event NOIR\_ENDQUESTION for resource Inform.Win1.MTEd2

# NOIR: called verb WGT\_Disable with arguments: 0x6287080a

# NOIR: called verb NOIR\_GetAtomId with arguments: Product.Typical, 4

# NOIR: verb NOIR\_GetAtomId returns pointer 0x5ff70ba8

# NOIR: called verb NOIR\_LinkTextEdit with arguments: 0x6287080a, 0x5ff70ba8, 1

# NOIR: Executing script for event NOIR\_ATOMUPDATED for resource Inform.Win1.MTEd2

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x6287080a

# NOIR: called verb NOIR\_TranslateStr with arguments: Are you satisfied these plastic resins for producing @V(Product.Typical)? If you want to choose new plastic resins in addition to these you should know something about product specification., 0

# NOIR: verb NOIR\_TranslateStr returns string Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb TED\_SetStr with arguments: 0x6287080a, Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb NOIR\_TranslateStr with arguments: Are you satisfied these plastic resins for producing @V(Product.Typical)? If you want to choose new plastic resins in addition to these you should know something about product specification., 0

# NOIR: verb NOIR\_TranslateStr returns string Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb TED\_SetStr with arguments: 0x6287080a, Are you satisfied these plastic resins for producing Unknown? If you want to choose new plastic resins in addition to these you should know something about product specification.

# Product.TypicalJ is set to Toys

# Condition |Product|.TypicalJ is precisely equal to "Boat hulls", "Toys", "Luggage", "Furniture", "Opticals", "Handles", "Sheeting", "Skylights", "Pens", "Signs", "Ski goggles", "Packaging containers", "Medical devices", "Safety glasses", "Steering wheels", "Cosmetic parts", "Toothbrush handles", "Single-ply roofing mem in Rule Information10. (True).

# Rule Information10 is set to true

# ConsumerSelect is set to True

# RHS: |Product|.TypicalJ is assigned to |Product|.Typical in rule Information10

# Product.Typical is set to Toys

# NOIR: Executing script for event NOIR\_ATOMUPDATED for resource Inform.Win1.Panel1.MTEd1

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x096f0012

# NOIR: called verb NOIR\_TranslateStr with arguments: Plastics Preselection for Producing @V(Product.Typical), 0

# NOIR: verb NOIR\_TranslateStr returns string Plastics Preselection for Producing Toys

# NOIR: called verb TED\_SetStr with arguments: 0x096f0012, Plastics Preselection for Producing Toys

# NOIR: Executing script for event NOIR\_ATOMUPDATED for resource Inform.Win1.MTEd2

# NOIR: called verb NOIR\_UpdateWgt with arguments: 0x6287080a

# NOIR: called verb NOIR\_TranslateStr with arguments: Are you satisfied these plastic resins for producing @V(Product.Typical)? If you want to choose new plastic resins in addition to these you should know something about product specification., 0

# NOIR: verb NOIR\_TranslateStr returns string Are you satisfied these plastic resins for producing Toys? If you want to choose new plastic resins in addition to these you should know something about product specification.

# NOIR: called verb TED\_SetStr with arguments: 0x6287080a, Are you satisfied these plastic resins for producing Toys? If you want to choose new plastic resins in addition to these you should know something about product specification.

# RHS: Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|Plastics|>.TypicalProduct;@STRING="@SUPERSET,@TEST=@V(Product.Typical),@RETURN=PrePlastics,@COMP=STRING";) in rule Information10

# <|Plastics|>.TypicalProduct=DAP.TypicalProduct,CAP.TypicalProduct,CAB.TypicalProduct,CA.TypicalProduct,PVC\_Rigid.TypicalProduct,PVC\_Flexible.TypicalProduct,PU\_TPs.TypicalProduct,PSO.TypicalProduct,PolyphenyleneEther.TypicalProduct,PMMA.TypicalProduct,PEEK.TypicalProduct,Polyarylate.TypicalProduct,PET.TypicalProduct,PBT.TypicalProduct,PVDF.TypicalProduct,PTFE.TypicalProduct,PFA.TypicalProduct,PCTFE.TypicalProduct,FEP.TypicalProduct,ETFE.TypicalProduct,Acetal\_Homopolymer.TypicalProduct,Acetal\_Copolymer.TypicalProduct,PC.TypicalProduct,U

# RHS: Execute "AtomNameValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>;@STRING="@RETURN=|PrePlastics|.Name";) in rule Information10

#

<|PrePlastics|>=ABS\_HighImpact,ABS\_MediumImpact,PS,EVA,Acetal\_Copolymer,Acetal\_Homopolymer,CA,CAB,CAP

# PrePlastics.Name is set to

CAP,CAB,CA,Acetal\_Homopolymer,Acetal\_Copolymer,EVA,PS,ABS\_MediumImpact,ABS\_HighImpact

# RHS: ConsumerSelect is assigned to ConsumerSelect in rule Information9

# RHS: ApplicationSelect is assigned to ApplicationSelect in rule Information1

# NOIR: verb NOIR\_Knowcex returns integer 1

# NOIR: Executing script for event LBOX\_CELLSELECTED for resource Inform.Win1.Panel1.LBox2

# NOIR: called verb NOIR\_GetAtomId with arguments: Product.Detail, 4

# NOIR: verb NOIR\_GetAtomId returns pointer 0x5ff70068

# NOIR: called verb LBOX\_CurGetCellString with arguments: 0x633f060c

# NOIR: verb LBOX\_CurGetCellString returns string Acrylonitrile-Butadiene-Styrene (ABS High Impact)

# NOIR: called verb NOIR\_Volunteer with arguments: 0x5ff70068, 5, Acrylonitrile-Butadiene-Styrene (ABS High Impact), 1

# NOIR: verb NOIR\_Volunteer returns integer 1

# NOIR: Executing script for event LBOX\_CELLSELECTED for resource Inform.Win1.Panel1.LBox2

# NOIR: called verb NOIR\_GetAtomId with arguments: Product.Detail, 4

# NOIR: verb NOIR\_GetAtomId returns pointer 0x5ff70068

# NOIR: called verb LBOX\_CurGetCellString with arguments: 0x633f060c

# NOIR: verb LBOX\_CurGetCellString returns string Polystyrene (PS)

# NOIR: called verb NOIR\_Volunteer with arguments: 0x5ff70068, 5, Polystyrene (PS), 1

# NOIR: verb NOIR\_Volunteer returns integer 1

# NOIR: Executing script for event TBUT\_HIT for resource Inform.Win1.Panel1.PBut6

# NOIR: called verb WGT\_GetWin with arguments: 0x629f02ba

# NOIR: verb WGT\_GetWin returns pointer 0x62870e6a

# NOIR: called verb NOIR\_ProcessForm with arguments: 0x62870e6a

# NOIR: called verb NOIR\_Knowcex

# Product.Detail is set to Acrylonitrile-Butadiene-Styrene (ABS High Impact)

# Product.Detail is set to Polystyrene (PS)

# ABS\_HighImpact.FirstSelect is set to False

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# ABS_MediumImpact.FirstSelect is set to False
# PS.FirstSelect is set to True
# EVA.FirstSelect is set to False
# Acetal_Copolymer.FirstSelect is set to False
# Acetal_Homopolymer.FirstSelect is set to False
# CA.FirstSelect is set to False
# CAB.FirstSelect is set to False
# CAP.FirstSelect is set to False
# Invoking method OrderOfSources attached to <System> instantiated for DESCRIPTION
# Condition |Product|.Detail is precisely equal to KNOWN in Rule DetailResin. (True).
# Rule DetailResin is set to true
# DESCRIPTION is set to True
# RHS: Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>.
Name;@STRING="@ALL=ALL,@TEST=@V(Product.Detail),@RETURN=
DetailPlastics,@COMP=STRING";) in rule DetailResin
#
<|PrePlastics|>.Name=CAP.Name,CAB.Name,CA.Name,Acetal_Homopolymer.Name,Acetal_
Copolymer.Name,EVA.Name,PS.Name,ABS_MediumImpact.Name,ABS_HighImpact.Name
# RHS: <|DetailPlastics|>.DetailWin is assigned to |DetailPlastics|.DetailWin in rule
DetailResin
# DetailPlastics.DetailWin is set to Detail.WinPS
# RHS: Execute "@V(DetailPlastics.DetailWin)"(@TYPE=FRM;@WAIT=TRUE;) in rule
DetailResin
# NOIR: verb NOIR_Knowcass returns integer 1
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinPS.PBut2
# NOIR: called verb WGT_GetWin with arguments: 0x629f040e
# NOIR: verb WGT_GetWin returns pointer 0x62870cd2
# NOIR: called verb WIN_Terminate with arguments: 0x62870cd2

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# NOIR: called verb NOIR_GetAtomId with arguments: RESETSHOW, 512
# NOIR: verb NOIR_GetAtomId returns pointer 0x5ca708a6
# NOIR: called verb NOIR_Suggest with arguments: 0x5ca708a6, 1
# Suggesting RESETSHOW
# NOIR: verb NOIR_Suggest returns integer 1
# NOIR: called verb NOIR_Knowcex
# RHS: Reset RESETSHOW in rule DetailResin
# Invoking method OrderOfSources attached to <System> instantiated for RESETSHOW
# DESCRIPTION is set to Unknown
# Rule DetailResin is set to unknown
# Condition Reset DESCRIPTION in Rule ResetDetail. (True).
# <|DetailPlastics|>=PS
# Condition Delete Object <|DetailPlastics|> |DetailPlastics| in Rule ResetDetail. (True).
# DetailPlastics.DetailWin is set to Unknown
# Condition Execute "ResetFrame"(@WAIT=TRUE;@ATOMID=|DetailPlastics|;) in Rule
ResetDetail. (True).
# Condition Reset RESETSHOW in Rule ResetDetail. (True).
# Condition Reset DESCRIPTION in Rule ResetDetail. (True).
# <|DetailPlastics|>=
# Condition Delete Object <|DetailPlastics|> |DetailPlastics| in Rule ResetDetail. (False).
# Rule ResetDetail is set to false
# RESETSHOW is set to False
# NOIR: verb NOIR_Knowcex returns integer 1
# NOIR: Executing script for event LBOX_CELLSELECTED for resource
Inform.Win1.Panel1.LBox2
# NOIR: called verb NOIR_GetAtomId with arguments: Product.Detail, 4
# NOIR: verb NOIR_GetAtomId returns pointer 0x5ff70068
# NOIR: called verb LBOX_CurGetCellString with arguments: 0x633f060c

```

```

# NOIR: verb LBOX_CurGetCellString returns string Acrylonitrile-Butadiene-Styrene (ABS
High Impact)
# NOIR: called verb NOIR_Volunteer with arguments: 0x5ff70068, 5, Acrylonitrile-
Butadiene-Styrene (ABS High Impact), 1
# NOIR: verb NOIR_Volunteer returns integer 1
# NOIR: Executing script for event TBUT_HIT for resource Inform.Win1.Panel1.PBut6
# NOIR: called verb WGT_GetWin with arguments: 0x629f02ba
# NOIR: verb WGT_GetWin returns pointer 0x62870e6a
# NOIR: called verb NOIR_ProcessForm with arguments: 0x62870e6a
# NOIR: called verb NOIR_Knowcass
# Product.Detail is set to Acrylonitrile-Butadiene-Styrene (ABS High Impact)
# ABS_HighImpact.FirstSelect is set to True
# ABS_MediumImpact.FirstSelect is set to False
# PS.FirstSelect is set to False
# EVA.FirstSelect is set to False
# Acetal_Copolymer.FirstSelect is set to False
# Acetal_Homopolymer.FirstSelect is set to False
# CA.FirstSelect is set to False
# CAB.FirstSelect is set to False
# CAP.FirstSelect is set to False
# Invoking method OrderOfSources attached to <System> instantiated for DESCRIPTION
# Condition |Product|.Detail is precisely equal to KNOWN in Rule DetailResin. (True).
# Rule DetailResin is set to true
# DESCRIPTION is set to True
# RHS: Execute "TestMultiValue"(@WAIT=TRUE;@ATOMID=<|PrePlastics|>.
Name;@STRING="(@ALL=ALL,@TEST=@V(Product.Detail),@RETURN=
DetailPlastics,@COMP=STRING";) in rule DetailResin

```



```

#
<|PrePlastics|>.Name=CAP.Name,CAB.Name,CA.Name,Acetal_Homopolymer.Name,Acetal_
Copolymer.Name,EVA.Name,PS.Name,ABS_MediumImpact.Name,ABS_HighImpact.Name
# RHS: <|DetailPlastics|>.DetailWin is assigned to |DetailPlastics|.DetailWin in rule
DetailResin
# DetailPlastics.DetailWin is set to Detail.WinABS
# RHS: Execute "@V(DetailPlastics.DetailWin)"(@TYPE=FRM;@WAIT=TRUE;) in rule
DetailResin
# NOIR: Executing script for event WIN_OPENED for resource Detail.WinABS
# NOIR: called verb WIN_Maximize with arguments: 0x62870cd2
# NOIR: called verb NOIR_UpdateWgt with arguments: 0x62870cd2
# NOIR: verb NOIR_Knowcex returns integer 1
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinABS.PBut4
# NOIR: called verb WIN_OpenByName with arguments: Detail.WinABS1
# NOIR: Executing script for event WIN_OPENED for resource Detail.WinABS1
# NOIR: called verb WIN_Maximize with arguments: 0x096f0b3a
# NOIR: called verb NOIR_UpdateWgt with arguments: 0x096f0b3a
# NOIR: verb WIN_OpenByName returns pointer 0x096f0b3a
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinABS1.PBut1
# NOIR: called verb WGT_GetWin with arguments: 0x592f00bc
# NOIR: verb WGT_GetWin returns pointer 0x096f0b3a
# NOIR: called verb NOIR_ProcessForm with arguments: 0x096f0b3a
# NOIR: called verb WGT_GetWin with arguments: 0x592f00bc
# NOIR: verb WGT_GetWin returns pointer 0x096f0b3a
# NOIR: called verb WIN_Terminate with arguments: 0x096f0b3a
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinABS.PBut5
# NOIR: called verb WIN_OpenByName with arguments: Detail.WinABS3
# NOIR: verb WIN_OpenByName returns pointer 0x096f0b3a

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# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS3.PBut1  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f02ba  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb NOIR\_ProcessForm with arguments: 0x096f0b3a  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f02ba  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb WIN\_Terminate with arguments: 0x096f0b3a  
# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS.PBut3  
# NOIR: called verb WIN\_OpenByName with arguments: Detail.WinABS2  
# NOIR: verb WIN\_OpenByName returns pointer 0x096f0b3a  
# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS2.PBut1  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f0364  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb NOIR\_ProcessForm with arguments: 0x096f0b3a  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f0364  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb WIN\_Terminate with arguments: 0x096f0b3a  
# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS.PBut1  
# NOIR: called verb WIN\_OpenByName with arguments: Detail.WinABS4  
# NOIR: verb WIN\_OpenByName returns pointer 0x096f0b3a  
# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS4.PBut1  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f040e  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb NOIR\_ProcessForm with arguments: 0x096f0b3a  
# NOIR: called verb WGT\_GetWin with arguments: 0x592f040e  
# NOIR: verb WGT\_GetWin returns pointer 0x096f0b3a  
# NOIR: called verb WIN\_Terminate with arguments: 0x096f0b3a  
# NOIR: Executing script for event TBUT\_HIT for resource Detail.WinABS.PBut5

```

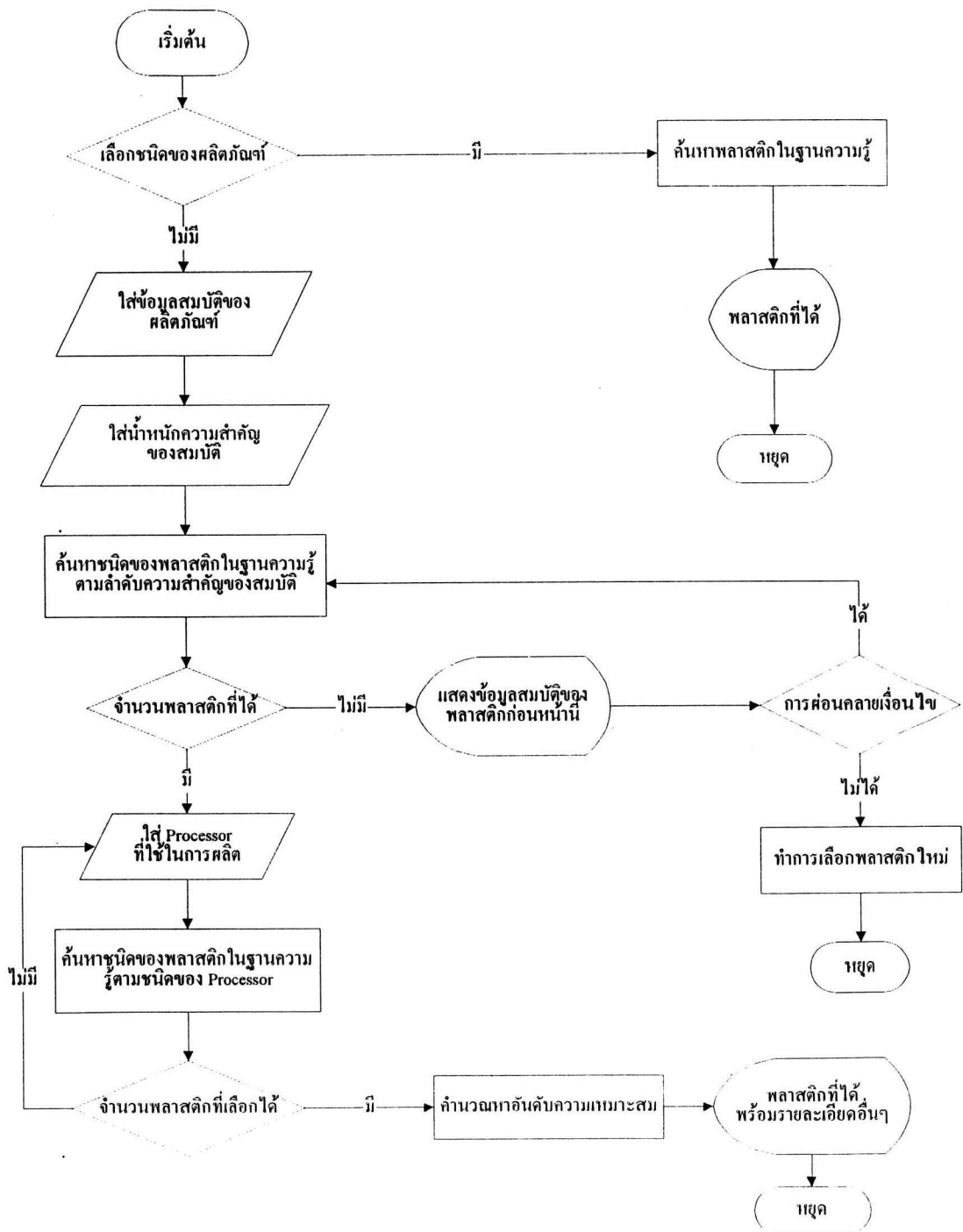
# NOIR: called verb WIN_OpenByName with arguments: Detail.WinABS3
# NOIR: verb WIN_OpenByName returns pointer 0x096f0b3a
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinABS3.PBut 1
# NOIR: called verb WGT_GetWin with arguments: 0x592f040e
# NOIR: verb WGT_GetWin returns pointer 0x096f0b3a
# NOIR: called verb NOIR_ProcessForm with arguments: 0x096f0b3a
# NOIR: called verb WGT_GetWin with arguments: 0x592f040e
# NOIR: verb WGT_GetWin returns pointer 0x096f0b3a
# NOIR: called verb WIN_Terminate with arguments: 0x096f0b3a
# NOIR: Executing script for event TBUT_HIT for resource Detail.WinABS.PBut2
# NOIR: called verb WGT_GetWin with arguments: 0x629f0e04
# NOIR: verb WGT_GetWin returns pointer 0x62870cd2
# NOIR: called verb WIN_Terminate with arguments: 0x62870cd2
# NOIR: called verb NOIR_GetAtomId with arguments: RESETSHOW, 512
# NOIR: verb NOIR_GetAtomId returns pointer 0x5ca708a6
# NOIR: called verb NOIR_Suggest with arguments: 0x5ca708a6, 1
# Suggesting RESETSHOW
# NOIR: verb NOIR_Suggest returns integer 1
# NOIR: called verb NOIR_Knowcass
# RHS: Reset RESETSHOW in rule DetailResin
# RESETSHOW is set to Unknown
# Rule ResetDetail is set to unknown
# Invoking method OrderOfSources attached to <System> instantiated for RESETSHOW
# DESCRIPTION is set to Unknown
# Rule DetailResin is set to unknown
# Condition Reset DESCRIPTION in Rule ResetDetail. (True).
# <|DetailPlastics|>=ABS_HighImpact
# Condition Delete Object <|DetailPlastics|> |DetailPlastics| in Rule ResetDetail. (True).

```

```
# DetailPlastics.DetailWin is set to Unknown
# Condition Execute "ResetFrame"(@WAIT=TRUE;@ATOMID=|DetailPlastics|;) in Rule
ResetDetail. (True).
# Condition Reset RESETSHOW in Rule ResetDetail. (True).
# Condition Reset DESCRIPTION in Rule ResetDetail. (True).
# <|DetailPlastics|>=
# Condition Delete Object <|DetailPlastics|> |DetailPlastics| in Rule ResetDetail. (False).
# Rule ResetDetail is set to false
# RESETSHOW is set to False
# NOIR: verb NOIR_Knowcass returns integer 1
```

# ภาคผนวก ค

## อัลกอริทึมของระบบฐานความรู้ต้นแบบสำหรับการเลือกพลาสติก



รูปที่ ค1 แสดงอัลกอริทึมการเลือกพลาสติก

## ประวัติผู้เขียน

นางสาวอมราภรณ์ หลิมจิตรธรรม เกิดวันที่ 26 มิถุนายน พ.ศ. 2509 สำเร็จการศึกษา  
ชั้นมัธยมศึกษาปีที่ 6 จากโรงเรียนฤกษ์เกิดวิทยาลัย จังหวัดภูเก็ต เมื่อปี พ.ศ.2528 สำเร็จการ  
ศึกษาปริญญาตรีวิทยาศาสตร์ สาขาเคมี จากมหาวิทยาลัยเชียงใหม่ เมื่อปี พ.ศ. 2532 เคย  
ทำงานในตำแหน่งหัวหน้านักเคมี ที่บริษัท แมริคอท จิวเวอรี่ (ประเทศไทย) จำกัด เมื่อปี พ.ศ.  
2532 เคยทำงานในตำแหน่งวิศวกรฝ่ายเทคโนโลยีการผลิตเยื่อ ที่บริษัท แอ็ดวานซ์ อะโกร  
จำกัด (มหาชน) และปัจจุบันทำงานในฝ่ายพัฒนาธุรกิจ กลุ่มบริษัทเกษตรรุ่งเรืองพืชผล