SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: ULTRACHROME 1552
Product number: 01552

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: coating

1.3. Details of the supplier of the safety data sheet

Supplier:
ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.com

1.4. Emergency telephone number

Emergency telephone: +44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)
Physical hazards: Flam. Liq. 3 - H226
Environmental hazards: Not Classified

Human health: Irritating to eyes. Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Persons with impaired lung function should not handle this product. Persons susceptible to allergic reactions should not handle this product.

2.2. Label elements

Pictogram:
- [Flammable]
- [Caution]
- [Hazardous Substance]

Signal word: Danger
ULTRACHROME 1552

Hazard statements
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/ doctor if you feel unwell.

Supplemental label information
EUH204 Contains isocyanates. May produce an allergic reaction.

Contains
ALIPHATIC POLYSOCYANATE, HEXAMETHYLENE-DI-ISOCYANATE, TOSYL ISOCYANATE

Supplementary precautionary statements
P233 Keep container tightly closed.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>1-METHOXY-2-PROPANOL</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 107-98-2</td>
<td>EC number: 203-539-1</td>
</tr>
</tbody>
</table>

Classification
Flam. Liq. 3 - H226
STOT SE 3 - H336
## ULTRACHROME 1552

### ALIPHATIC POLYISOCYANATE

<table>
<thead>
<tr>
<th>CAS number: 28182-81-2</th>
</tr>
</thead>
</table>

**Classification**  
Skin Sens. 1 - H317

### HEXAMETHYLENE-DI-ISOCYANATE

<table>
<thead>
<tr>
<th>CAS number: 822-06-0</th>
<th>EC number: 212-485-8</th>
</tr>
</thead>
</table>

**Classification**  
Acute Tox. 3 - H331  
Skin Irrit. 2 - H315  
Eye Irrit. 2 - H319  
Resp. Sens. 1 - H334  
Skin Sens. 1 - H317  
STOT SE 3 - H335

### TOSYL ISOCYANATE

<table>
<thead>
<tr>
<th>CAS number: 4083-64-1</th>
<th>EC number: 223-810-8</th>
</tr>
</thead>
</table>

**Classification**  
Skin Irrit. 2 - H315  
Eye Irrit. 2 - H319  
Resp. Sens. 1 - H334  
STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid contact with eyes.

**Inhalation**  
Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Ingestion**  
Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Give plenty of water to drink. Get medical attention.

**Skin contact**  
Remove contaminated clothing immediately and wash skin with soap and water.

**Eye contact**  
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.

#### 4.2. Most important symptoms and effects, both acute and delayed

**General information**  
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**  
No specific recommendations. If in doubt, get medical attention promptly.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media
ULTRACHROME 1552

Suitable extinguishing media  Extinguish with foam, carbon dioxide or dry powder. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards  Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Vapours may ignite. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting  Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes.

Special protective equipment for firefighters  Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions  Eliminate all sources of ignition. Provide adequate ventilation. Do not breathe vapour. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions  Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up  Absorb spillage with sand or other inert absorbent. Transfer to covered steel drums for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections  Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions  Handle and open container with care. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions  Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s)  The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
ULTRACHROME 1552

**Occupational exposure limits**

**1-METHOXY-2-PROPANOL**

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk)  375 mg/m3(Sk)
Short-term exposure limit (15-minute):  WEL 150 ppm(Sk)  560 mg/m3(Sk)

**HEXAMETHYLENE-DI-ISOCYANATE**

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen)
Short-term exposure limit (15-minute):  WEL 0.07 mg/m3(Sen)

**TOSYL ISOCYANATE**

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen)
Short-term exposure limit (15-minute):  WEL 0.07 mg/m3(Sen)

WEL = Workplace Exposure Limit

**Ingredient comments**

WEL = Workplace Exposure Limits

**8.2. Exposure controls**

**Protective equipment**

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection

Plastic or rubber gloves, boots and suit.

Hygiene measures

Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

**SECTION 9: Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

**Appearance**

Liquid.

**Colour**

Clear liquid.

**Odour**

Sweetish.
ULTRACHROME 1552

Melting point  ND°C
Initial boiling point and range  150°C @
Flash point  46°C
Vapour density  >1
Relative density  1.06 - 1.10 @ 25 ºC
Solubility(ies)  Insoluble in water.
Auto-ignition temperature  NDA°C

9.2. Other information  Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity  Incompatible with: Water, Acids, or Alkalis Alcohols, glycols.

10.2. Chemical stability
Stability  Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions  May polymerise. Avoid contact with alkalis. Avoid heat.

10.4. Conditions to avoid
Conditions to avoid  Avoid contact with water. Reacts strongly with water. Avoid temperatures above 25ºC

10.5. Incompatible materials
Materials to avoid  Avoid contact with acids and alkalis. Water, moisture. Alcohols, glycols.

10.6. Hazardous decomposition products
Hazardous decomposition products  Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - inhalation
ATE inhalation (gases ppm)  9,333.33
ATE inhalation (vapours mg/l)  40.0
ATE inhalation (dusts/mists mg/l)  6.67

Inhalation  Toxic by inhalation. May cause sensitisation by inhalation.
Skin contact  May cause sensitisation by skin contact. Persons susceptible to allergic reactions should not handle this product.
Eye contact  Irritating to eyes.

SECTION 12: Ecological Information
ULTRACHROME 1552

Ecotoxicity

Avoid release to the environment.

12.1. Toxicity

Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility In soil

Mobility

Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class

08  04 99

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1992
UN No. (IMDG) 1992
UN No. (ICAO) 1992

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISOCYANATE)

Proper shipping name (IMDG) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISOCYANATE)

Proper shipping name (ICAO) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISOCYANATE)

14.3. Transport hazard class(es)

ADR/RID class 3
ULTRACHROME 1552

ADR/RID subsidiary risk 6.1
ADR/RID label 3 & 6.1
IMDG class 3
IMDG subsidiary risk 6.1
ICAO class/division 3
ICAO subsidiary risk 6.1

Transport labels

14.4. Packing group
ADR/RID packing group III
IMDG packing group III
ICAO packing group III

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user
EmS F-E, S-D
Emergency Action Code •3W
Hazard Identification Number 36 (ADR/RID)
Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 05/04/2018
Revision 16
Supersedes date 29/04/2016
ULTRACHROME 1552

Hazard statements in full

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H360D May damage the unborn child.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.