# SAFETY DATA SHEET
## ULTRACHROME 1552

## 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>ULTRACHROME 1552</td>
</tr>
<tr>
<td><strong>Product number</strong></td>
<td>01552</td>
</tr>
</tbody>
</table>

### Recommended use of the chemical and restrictions on use

**Application**: coating

### 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

### Emergency telephone number

**Emergency telephone**

+44(0)1235 239 670 (24h)

## 2. Hazard(s) identification

### Classification of the substance or mixture

#### Physical hazards

Flam. Liq. 3 - H226

#### Health hazards

Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Repr. 1B - H360D

#### 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.

### Label elements

#### Pictogram

![Flammable](image1) ![Warning](image2) ![Corrosion](image3)

#### 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.
H360D May damage the unborn child.
H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
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 vapor/ spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P302+P352 If on skin: Wash with plenty of water.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/ attention.
P312 Call a poison center/ doctor if you feel unwell.
P321 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.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains
ALIPHATIC POLYISOCYANATE, HEXAMETHYLENE-DI-ISOCYANATE, TOSYL ISOCYANATE, 2-METHOXYPROPYL ACETATE

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

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>ALIPHATIC POLYISOCYANATE</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 28182-81-2</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Skin Sens. 1 - H317
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<table>
<thead>
<tr>
<th>HEXAMETHYLENE-DI-ISOCYANATE</th>
<th>5-10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 822-06-0</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3 - H331</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>Resp. Sens. 1 - H334</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOSYL ISOCYANATE</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 4083-64-1</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>Resp. Sens. 1 - H334</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>

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

### 4. First-aid measures

**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.

**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.

**Indication of immediate medical attention and special treatment needed**

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

### 5. Fire-fighting measures

**Extinguishing media**

**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.
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### Specific hazards
Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Vapours may ignite. Vapors 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.

### Advice for firefighters

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

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

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Environmental precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Avoid or minimize 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.</td>
</tr>
</tbody>
</table>

#### Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>Methods for cleaning up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorb spillage with sand or other inert absorbent. Transfer to covered steel drums for disposal. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference to other sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear protective clothing as described in Section 8 of this safety data sheet.</td>
</tr>
</tbody>
</table>

### 7. Handling and storage

#### Precautions for safe handling

<table>
<thead>
<tr>
<th>Usage precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handle and open container with care. Provide adequate ventilation. Avoid inhalation of vapors. 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions for safe storage, including any incompatibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific end uses(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The identified uses for this product are detailed in Section 1.</td>
</tr>
</tbody>
</table>

### 8. Exposure Controls/personal protection

<table>
<thead>
<tr>
<th>Ingredient comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL = Workplace Exposure Limits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure controls</th>
</tr>
</thead>
</table>
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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 OSHA 1910.133.

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 OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. 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 OSHA 1910.134.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Clear liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweetish.</td>
</tr>
<tr>
<td>Melting point</td>
<td>ND°C</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>150°C @</td>
</tr>
<tr>
<td>Flash point</td>
<td>46°C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.06 - 1.10 @ @ 25 °C°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>NDA°C</td>
</tr>
<tr>
<td>Other information</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity
Incompatible with: Water, Acids, or Alkalis Alcohols, glycols.
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Stability
Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions
May polymerize. Avoid contact with alkalis. Avoid heat.

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

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

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

11. Toxicological information

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.

12. Ecological Information

Ecotoxicity
Avoid release to the environment.

Toxicity
Not considered toxic to fish.

Persistence and degradability

Persistence and degradability
There are no data on the degradability of this product.

Bio-accumulative potential

Bio-Accumulative Potential
No data available on bioaccumulation.

Mobility in soil

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

Other adverse effects
Not available.

13. Disposal considerations

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.
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14. Transport information

UN Number
UN No. (TDG) 1992
UN No. (IMDG) 1992
UN No. (ICAO) 1992
UN No. (DOT) 1992

UN proper shipping name
Proper shipping name (TDG) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISO CYANATE)
Proper shipping name (IMDG) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISO CYANATE)
Proper shipping name (ICAO) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISO CYANATE)
Proper shipping name (DOT) FLAMMABLE LIQUID, TOXIC, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, HEXAMETHYLENE-DI-ISO CYANATE)

Transport hazard class(es)
TDG class 3
TDG subsidiary risk 6.1
TDG label(s) 3 & 6.1
IMDG Class 3
IMDG subsidiary risk 6.1
ICAO class/division 3
ICAO subsidiary risk 6.1

Transport labels

Packing group
TDG Packing Group III
IMDG packing group III
ICAO packing group III
DOT packing group III

Environmental hazards
Environmentally Hazardous Substance No.

Special precautions for user
EmS F-E, S-D
**ULTRACHROME 1552**

<table>
<thead>
<tr>
<th>15. Regulatory information</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Other Information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revision date</th>
<th>4/5/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision</td>
<td>16</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>4/29/2016</td>
</tr>
</tbody>
</table>

**Hazard statements in full**
- H226 Flammable liquid and vapor.
- 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.