1. Identification

Product identifier

Product name: ULTRATHANE 5410B BROWN

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: Not Classified

Health hazards: Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Repr. 1B - H360 STOT RE 2 - H373

Environmental hazards: Aquatic Chronic 2 - H411

Human health: 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.

Label elements

Pictogram

Signal word: Danger
ULTRATHANE 5410B BROWN

Hazard statements
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H360 May damage fertility or the unborn child.
H302+H312 Harmful if swallowed or in contact with skin.

Precautionary statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapor/ spray.
P261 Avoid breathing vapor/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310 If swallowed: Immediately call a poison center/ doctor.
P302+P352 If on skin: Wash with plenty of water.
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.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P330 Rinse mouth.
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.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains
DIETHYLMETHYLBENZENEDIAMINE, DIBUTYL Tin DILAURATE

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

3. Composition/Information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>DIETHYLMETHYLBENZENEDIAMINE</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 68479-98-1</td>
<td></td>
</tr>
<tr>
<td>M factor (Acute) = 1</td>
<td>M factor (Chronic) = 1</td>
</tr>
</tbody>
</table>

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Eye Irrit. 2 - H319
STOT RE 2 - H373
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410
ULTRATHANE 5410B BROWN

N,N,N',N'-TETRAKIS(2-HYDROXYLPROPYL)ETHYLENEDIAMINE 10-30%
CAS number: 102-60-3

Classification
Eye Irrit. 2 - H319

POLYOXYPROPYLENEDIAMINE 1-5%
CAS number: 9046-10-0

Classification
Skin Corr. 1B - H314

DIBUTYLTIN DILAURATE <1%
CAS number: 77-58-7
M factor (Acute) = 1

Classification
Acute Tox. 4 - H302
Skin Corr. 1C - H314
Skin Sens. 1 - H317
Muta. 2 - H341
Repr. 1B - H360
STOT SE 1 - H370
STOT RE 1 - H372
Aquatic Acute 1 - H400

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).

Inhalation
Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

Ingestion
Do not induce vomiting. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention. Show this Safety Data Sheet to the medical personnel.

Skin Contact
Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

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
ULTRATHANE 5410B BROWN

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.

Special hazards arising from the substance or mixture

Specific hazards: In case of fire and/or explosion do not breathe fumes. Toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting: Avoid breathing fire gases or vapors. Keep up-wind to avoid fumes. Cool containers exposed to flames with water until well after the fire is out.

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

Personal precautions: No smoking, sparks, flames or other sources of ignition near spillage. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Keep upwind.

Environmental precautions

Environmental precautions: 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.

Methods and material for containment and cleaning up

Methods for cleaning up: Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.

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

7. Handling and storage

Precautions for safe handling

Usage precautions: 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. Avoid inhalation of vapors/spray and contact with skin and eyes. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight. Store away from incompatible materials (see Section 10).

Specific end uses(s): The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Ingredient comments: WEL = Workplace Exposure Limits

Exposure controls
ULTRATHANE 5410B BROWN

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
Wear chemical protective suit.

Hygiene measures
Provide eyewash station and safety shower. 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.

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. Wear a respirator fitted with the following cartridge: Gas filter, type K. 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

Appearance
Liquid.

Color
Black. or Brown.

Odor
Strong.

pH
Not available.

Melting point
Not available.

Initial boiling point and range
175°C @

Flash point
°C Not available.

Evaporation rate
Not available. «59» «184» «109020»

Upper/lower flammability or explosive limits
Not available.

Vapor pressure
0.2 mm Hg @ °C

Vapor density
Not available.

Relative density
0.98 @ 25 °C

Solubility(ies)
Insoluble in water.

Partition coefficient
Not available.
ULTRATHANE 5410B BROWN

Decomposition Temperature  Not available.
Viscosity  Not available.
Volutility  29.16
Volatile organic compound  This product contains a maximum VOC content of 29.16%.

10. Stability and reactivity

Reactivity  Stable at normal ambient temperatures and when used as recommended. The following materials may react violently with the product: Strong oxidizing agents.
Stability  Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions  Will not polymerize.
Conditions to avoid  Avoid heat, flames and other sources of ignition.
Materials to avoid  Avoid contact with oxidizing agents.
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 - oral  ATE oral (mg/kg)  500.0
Acute toxicity - dermal  ATE dermal (mg/kg)  1,100.0

General information  Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation  Vapors may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion  Harmful: danger of serious damage to health by prolonged exposure if swallowed. May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach.
Skin Contact  Irritating to skin. Prolonged and frequent contact may cause redness and irritation.
Eye contact  Irritating to eyes.
Route of entry  Inhalation Ingestion. Skin and/or eye contact

12. Ecological Information

Ecotoxicity  Toxic to aquatic organisms. Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.
Toxicity  Very toxic to aquatic organisms.
Persistence and degradability  There are no data on the degradability of this product.
ULTRATHANE 5410B BROWN

Bioaccumulative potential
Bio-Accumulative Potential  No data available on bioaccumulation.
Partition coefficient  Not available.
Mobility in soil
Mobility  Avoid or minimize the creation of any environmental contamination. Avoid the spillage or runoff entering drains, sewers or watercourses.

Other adverse effects
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.
Waste class  08 04 99

14. Transport information

General  No other information known.
UN Number
UN No. (TDG)  3082
UN No. (IMDG)  3082
UN No. (ICAO)  3082
UN No. (DOT)  3082
UN proper shipping name
Proper shipping name (TDG)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHYLMETHYLBENZENEDIAMINE)
Proper shipping name (IMDG)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHYLMETHYLBENZENEDIAMINE)
Proper shipping name (ICAO)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHYLMETHYLBENZENEDIAMINE)
Proper shipping name (DOT)  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHYLMETHYLBENZENEDIAMINE)

Transport hazard class(es)
TDG class  9
TDG label(s)  9
IMDG Class  9
ICAO class/division  9
ULTRATHANE 5410B BROWN

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

Special precautions for user
EmS F-A, S-F

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information required.

15. Regulatory information

16. Other information

Revision date 4/5/2018
Revision 20
Supersedes date 4/29/2016
SDS No. 20659

Hazard statements in full
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

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.