



**SAFETY DATA SHEET  
IRATHANE P255EP**

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

**1.1. Product identifier**

**Product name** IRATHANE P255EP

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

**Identified uses** coating Apply by trowel

**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** Not Classified

**Health hazards** Acute Tox. 4 - H332 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351

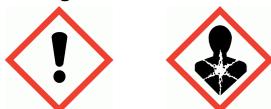
**Environmental hazards** Aquatic Chronic 3 - H412

**Human health**

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

**2.2. Label elements**

**Pictogram**



**Signal word**

Danger

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<b>Hazard statements</b>	H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H351 Suspected of causing cancer. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P271 Use only outdoors or in a well-ventilated area. 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. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
<b>Supplemental label information</b>	EUH204 Contains isocyanates. May produce an allergic reaction.
<b>Contains</b>	DICHLOROMETHANE, 4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE), DIPHENYLMETHANE-4,4'-DI-ISOCYANATE
<b>Supplementary precautionary statements</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing vapour/ spray. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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). P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up. 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

<b>ALPHA-HYDRO-OMEGA-HYDROXYPOLY(OXY-1,4-BUTANEDIYL)</b>	<b>30-60%</b>
CAS number: 25190-06-1	
<b>Classification</b> Aquatic Chronic 3 - H412	
<b>DICHLOROMETHANE</b>	<b>10-30%</b>
CAS number: 75-09-2                      EC number: 200-838-9	
<b>Classification</b> Carc. 2 - H351	

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<b>4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)</b>	<b>5-10%</b>
CAS number: 5124-30-1	EC number: 225-863-2
<b>Classification</b>	
Acute Tox. 3 - H331	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
STOT SE 3 - H335	
<b>2,6-DITERTIARYBUTYL-PARA-CRESOL</b>	<b>1-5%</b>
CAS number: 128-37-0	
M factor (Chronic) = 1	
<b>Classification</b>	
Aquatic Chronic 1 - H410	
<b>DIPHENYLMETHANE-4,4'-DI-ISOCYANATE</b>	<b>1-5%</b>
CAS number: 101-68-8	EC number: 202-966-0
<b>Classification</b>	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	
<b>1-DODECANOL</b>	<b>&lt;1%</b>
CAS number: 112-53-8	
M factor (Acute) = 1	
<b>Classification</b>	
Eye Irrit. 2 - H319	
Aquatic Acute 1 - H400	
Aquatic Chronic 2 - H411	

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**

Avoid inhalation of vapours and contact with skin and eyes. 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. Get medical attention if any discomfort continues.

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<b>Ingestion</b>	Try to induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water.
<b>Eye contact</b>	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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Get medical attention promptly if symptoms occur after washing.
<b>Inhalation</b>	May cause an asthma-like shortness of breath. Coughing, chest tightness, feeling of chest pressure.
<b>Ingestion</b>	May cause unconsciousness, blindness and possibly death.
<b>Skin contact</b>	Severe irritation. Allergic rash. This product is rapidly absorbed through the skin and may cause symptoms similar to those of ingestion.
<b>Eye contact</b>	May cause severe eye irritation.

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

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder.
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### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Avoid breathing fire gases or vapours.
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### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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## SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Do not breathe vapour.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Avoid 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.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb spillage with non-combustible, absorbent material. Transfer to a dry metal container, keeping it open for 48 hours. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	Wear protective clothing as described in Section 8 of this safety data sheet.
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## SECTION 7: Handling and storage

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### 7.1. Precautions for safe handling

<b>Usage precautions</b>	Provide adequate ventilation. Use only in well-ventilated areas. Avoid inhalation of vapours/spray and contact with skin and eyes. Handle and open container with care. Do not use in confined spaces without adequate ventilation and/or respirator. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.
<b>Advice on general occupational hygiene</b>	Do not eat, drink or smoke when using this product. Provide eyewash station and safety shower. Wash promptly with soap and water if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).
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### 7.3. Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### DICHLOROMETHANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 350 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 300 ppm(Sk) 1060 mg/m<sup>3</sup>(Sk)

##### 4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m<sup>3</sup>(Sen)

Short-term exposure limit (15-minute): WEL 0.07 mg/m<sup>3</sup>(Sen)

##### DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m<sup>3</sup>(Sen)

Short-term exposure limit (15-minute): WEL 0.07 mg/m<sup>3</sup>(Sen)

WEL = Workplace Exposure Limit

<b>Ingredient comments</b>	WEL = Workplace Exposure Limits
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#### DICHLOROMETHANE (CAS: 75-09-2)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 353 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 706 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 12 mg/kg/day
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#### 4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE) (CAS: 5124-30-1)

<b>DNEL</b>	Workers - Inhalation; Short term local effects: 0.6 mg/m <sup>3</sup> Workers - Inhalation; Long term local effects: 0.3 mg/m <sup>3</sup>
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#### DIPHENYLMETHANE-4,4'-DI-ISOCYANATE (CAS: 101-68-8)

<b>DNEL</b>	Workers - Inhalation; Long term local effects: 0.05 mg/m <sup>3</sup> Workers - Inhalation; Short term local effects: 0.1 mg/m <sup>3</sup>
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### 8.2. Exposure controls

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### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use approved respirator if air contamination is above an acceptable level. Ensure operatives are trained to minimise exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

### Hand protection

Wear protective gloves made of the following material: Rubber or plastic. To protect hands from chemicals, gloves should comply with European Standard EN374. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. It is recommended that gloves are made of the following material: Butyl rubber. Laminate of polyethylene and ethylene vinyl alcohol (PE/EVOH). Neoprene. Frequent changes are recommended. The selected gloves should have a breakthrough time of at least 6 hours.

### Other skin and body protection

Wear apron or protective clothing in case of contact.

### 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. Change work clothing daily before leaving workplace.

### 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: Combination filter, type A2/P2. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

## SECTION 9: Physical and Chemical Properties

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

Appearance	Liquid.
Colour	Translucent.
Odour	Ether.
Melting point	8°C
Flash point	does not flash°C
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 33 Lower flammable/explosive limit: 13
Relative density	1.08 @ 20 °C°C
Solubility(ies)	Slightly soluble in water.

### 9.2. Other information

Other information	Not available.
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## IRATHANE P255EP

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 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** Not available.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.

#### 10.5. Incompatible materials

**Materials to avoid** Water, moisture.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 11,949.38

**ATE inhalation (vapours mg/l)** 49.84

**ATE inhalation (dusts/mists mg/l)** 8.19

**General information** Limited evidence of a carcinogenic effect.

**Inhalation** Toxic by inhalation. Irritating to respiratory system. May cause sensitisation by inhalation.

**Skin contact** Irritating to skin. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.

**Eye contact** Irritating to eyes.

**Acute and chronic health hazards** Limited evidence of a carcinogenic effect. Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Persons susceptible to allergic reactions should not handle this product. Persons with impaired lung function should not handle this product..

**Route of entry** Inhalation Ingestion. Skin absorption

### SECTION 12: Ecological Information

**Ecotoxicity** Avoid release to the environment.

#### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

#### 12.2. Persistence and degradability

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**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** 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

Not applicable.

**UN No. (ADR/RID)** 2810

**UN No. (IMDG)** 2810

**UN No. (ICAO)** 2810

### 14.2. UN proper shipping name

Not applicable.

**Proper shipping name (ADR/RID)** TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE, 4, 4'-METHYLENEDI(CYCLOHEXYL ISOCYCNATE))

**Proper shipping name (IMDG)** TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE, 4, 4'-METHYLENEDI(CYCLOHEXYL ISOCYCNATE))

**Proper shipping name (ICAO)** TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE, 4, 4'-METHYLENEDI(CYCLOHEXYL ISOCYCNATE))

**Proper shipping name (ADN)** TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE, 4, 4'-METHYLENEDI(CYCLOHEXYL ISOCYCNATE))

### 14.3. Transport hazard class(es)

**ADR/RID class** 6.1

**ADR/RID label** 6.1

**IMDG class** 6.1

**ICAO class/division** 6.1

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### Transport labels



#### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

#### 14.5. Environmental hazards

#### 14.6. Special precautions for user

Not applicable.

EmS	F-A, S-A
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	60
Tunnel restriction code	(E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
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#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

Revision date	04/04/2018
Revision	2
Supersedes date	25/05/2015

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### Hazard statements in full

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.  
H351 Suspected of causing cancer.  
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.  
H412 Harmful 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.