



**SAFETY DATA SHEET  
STYROTHANE 5321B-FR**

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

**1.1. Product identifier**

**Product name** STYROTHANE 5321B-FR

**Product number** 5321B02

**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** Not Classified

**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319

**Environmental hazards** Not Classified

**2.2. Label elements**

**Pictogram**



**Signal word** Warning

**Hazard statements** H302+H332 Harmful if swallowed or if inhaled.  
H319 Causes serious eye irritation.

## STYROTHANE 5321B-FR

<b>Precautionary statements</b>	P261 Avoid breathing vapour/ spray.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
	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.
	P337+P313 If eye irritation persists: Get medical advice/ attention.
<b>Supplementary precautionary statements</b>	P264 Wash contaminated skin thoroughly after handling.
	P270 Do not eat, drink or smoke when using this product.
	P271 Use only outdoors or in a well-ventilated area.
	P312 Call a POISON CENTER/ doctor if you feel unwell.
	P330 Rinse mouth.
	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>N,N,N',N'-TETRAKIS(2-HYDROXYLPROPYL)ETHYLENEDIAMINE</b>	<b>10-30%</b>
CAS number: 102-60-3	
<b>Classification</b> Eye Irrit. 2 - H319	
<b>TRIS(2-CHLORO-1-METHYLETHYL) PHOSPHATE</b>	<b>10-30%</b>
CAS number: 13674-84-5                      EC number: 237-158-7	
<b>Classification</b> Acute Tox. 4 - H302	
<b>POLYETHER DIOL</b>	<b>5-10%</b>
CAS number: 9003-11-6	
<b>Classification</b> Aquatic Chronic 3 - H412	
<b>BUTANE-1,4-DIOL</b>	<b>1-5%</b>
CAS number: 110-63-4                      EC number: 203-786-5	
<b>Classification</b> Acute Tox. 4 - H302 STOT SE 3 - H336	

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

## STYROTHANE 5321B-FR

<b>General information</b>	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).
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<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.
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### 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>	Irritating gases or vapours.
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### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapours.
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<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>	Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.
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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. Collect and place in suitable waste disposal containers and seal securely. 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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## STYROTHANE 5321B-FR

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Provide adequate ventilation. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking. 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.

#### 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. 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

##### Occupational exposure limits

##### BUTANE-1,4-DIOL

Short-term exposure limit (15-minute): AGW 200 mg/m<sup>3</sup>

AGW = Arbeitsplatzgrenzwert.

**Ingredient comments** WEL = Workplace Exposure Limits

#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

##### 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

Wear chemical protective 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. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

## STYROTHANE 5321B-FR

**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

<b>Appearance</b>	Coloured liquid.
<b>Odour</b>	Mild.
<b>Initial boiling point and range</b>	>148.8°C @
<b>Flash point</b>	135°C
<b>Relative density</b>	1.13 - 1.18 @ @ 25 °C°C
<b>Solubility(ies)</b>	Insoluble in water.
<b>Auto-ignition temperature</b>	NDA°C

#### 9.2. Other information

**Other information** Not available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** Acids. Strong oxidising agents. Isocyanates.

#### 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** Avoid contact with oxidising agents. Strong acids. Isocyanates.

#### 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 - oral

**ATE oral (mg/kg)** 500.0

##### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 11.0

## STYROTHANE 5321B-FR

<b>Skin contact</b>	Irritating to skin. Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	Irritating to eyes.

### TRIS(2-CHLORO-1-METHYLETHYL) PHOSPHATE

#### Acute toxicity - oral

ATE oral (mg/kg) 500.0

### SECTION 12: Ecological Information

**Ecotoxicity** The product is not expected to be toxic to aquatic organisms.

#### 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** Do not release into the environment. 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

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

No information required.

#### 14.2. UN proper shipping name

No information required.

#### 14.3. Transport hazard class(es)

## STYROTHANE 5321B-FR

### Transport labels

No transport warning sign required.

### 14.4. Packing group

No information required.

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

No information required.

### 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 No information required.

Annex II of MARPOL 73/78

and the IBC Code

## 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).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Revision date</b>	04/04/2018
<b>Revision</b>	12
<b>Supersedes date</b>	29/04/2016
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. 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.