



**SAFETY DATA SHEET  
PROTEC II A300**

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

**1.1. Product identifier**

Product name                      PROTEC II A300

**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)**

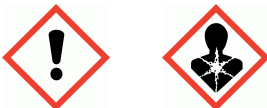
Physical hazards                      Not Classified

Health hazards                      Acute Tox. 4 - 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

Environmental hazards              Not Classified

**2.2. Label elements**

**Pictogram**



**Signal word**

Danger

## PROTEC II A300

<b>Hazard statements</b>	<p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H351 Suspected of causing cancer.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p>
<b>Precautionary statements</b>	<p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p>
<b>Supplemental label information</b>	<p>EUH204 Contains isocyanates. May produce an allergic reaction.</p>
<b>Contains</b>	<p>DIPHENYLMETHANE-4,4'-DI-ISOCYANATE, METHYLENEDIPHENYL DIISOCYANATE, DIPHENYLMETHANE DIISOCYANATE</p>
<b>Supplementary precautionary statements</b>	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## PROTEC II A300

<b>DIPHENYLMETHANE-4,4'-DI-ISOCYANATE</b>	<b>60-100%</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>METHYLENEDIPHENYL DIISOCYANATE</b>	<b>30-60%</b>
CAS number: 26447-40-5	EC number: 247-714-0
<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>DIPHENYLMETHANE DIISOCYANATE</b>	<b>10-30%</b>
CAS number: 39310-05-9	
<b>Classification</b> 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	

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
<b>Ingestion</b>	DO NOT induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

## PROTEC II A300

**Eye contact** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with the following media: Carbon dioxide (CO<sub>2</sub>). Dry chemicals.

### 5.2. Special hazards arising from the substance or mixture

### 5.3. Advice for firefighters

**Protective actions during firefighting** Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material. Do not allow water to enter the container as it will react with the product.

**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** Warn everybody of potential hazards and evacuate if necessary.

### 6.2. Environmental precautions

**Environmental precautions** Avoid or minimise the creation of any environmental contamination. Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Neutralise and absorb with absorbing material and dispose of as solid waste. 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. Neutralise using 10 parts neutraliser to 1 part isocyanate solution. Mix and allow to stand for 48 hours in containers, letting evolved carbon dioxide to vent. Neutraliser consists of 90% water, 3-8% concentrated ammonia (or sodium carbonate), 2% detergent.

### 6.4. Reference to other sections

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Provide adequate ventilation. Avoid inhalation of vapours. 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

#### Occupational exposure limits

## PROTEC II A300

### 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)

### METHYLENEDIPHENYL DIISOCYANATE

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

### DIPHENYLMETHANE-4,4'-DI-ISOCYANATE (CAS: 101-68-8)

#### DNEL

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>

### 8.2. Exposure controls

#### **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. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### **Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. To protect hands from chemicals, gloves should comply with European Standard EN374.

#### **Other skin and body protection**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### **Hygiene measures**

Provide eyewash station and safety shower.

#### **Respiratory protection**

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a full facepiece respirator fitted with the following cartridge: Organic vapour filter. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136.

## **SECTION 9: Physical and Chemical Properties**

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

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Yellow.
<b>Odour</b>	Fruity.
<b>Flash point</b>	176.6°C COC (Cleveland open cup).
<b>Evaporation rate</b>	<1
<b>Vapour density</b>	>1
<b>Relative density</b>	1.16 @ °C

### 9.2. Other information

<b>Volatility</b>	0
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 0 g/litre.

## PROTEC II A300

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

#### 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.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat. Avoid contact with the following materials: Strong oxidising agents. Avoid contact with water.

#### 10.5. Incompatible materials

**Materials to avoid** Alcohols, glycols. Amines. Strong alkalis. Strong acids. Reacts strongly with water.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon dioxide (CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 5,000.0

**ATE inhalation (vapours mg/l)** 12.22

**ATE inhalation (dusts/mists mg/l)** 1.67

**General information** The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation.

**Inhalation** Irritating to respiratory system. May cause inhalation hypersensitivity (occupational asthma) in sensitive individuals.

**Ingestion** Gastrointestinal symptoms, including upset stomach. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

**Skin contact** Irritating to skin. Prolonged and frequent contact may cause redness and irritation. May cause sensitisation or allergic reactions in sensitive individuals.

**Eye contact** Repeated exposure may cause chronic eye irritation. A single exposure may cause the following adverse effects: Corneal damage.

**Route of entry** Inhalation Ingestion. Skin and/or eye contact

**Medical symptoms** Over exposure can cause: Headache. Dizziness. Nausea, vomiting.

### SECTION 12: Ecological Information

**Ecotoxicity** There are no data on the ecotoxicity of this product.

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

#### 12.3. Bioaccumulative potential

## PROTEC II A300

### 12.4. Mobility in soil

### 12.5. Results of PBT and vPvB assessment

### 12.6. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>General information</b>	When handling waste, the safety precautions applying to handling of the product should be considered.
<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

<b>General</b>	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

### **Transport labels**

No transport warning sign required.

### 14.4. Packing group

### 14.5. Environmental hazards

#### **Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

### 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

<b>EU legislation</b>	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

## SECTION 16: Other information

<b>Revision date</b>	04/04/2018
<b>Revision</b>	6
<b>Supersedes date</b>	29/04/2016
<b>Hazard statements in full</b>	<p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H351 Suspected of causing cancer.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p>

## PROTEC II A300

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.