



**SAFETY DATA SHEET  
PHILLYCLAD 8 HARDENER**

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

**1.1. Product identifier**

**Product name** PHILLYCLAD 8 HARDENER

**Product number** Y0018

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

**Identified uses** Hardener.

**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 239670

**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 - H312 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361 STOT SE 3 - H335

**Environmental hazards** Aquatic Chronic 3 - H412

**2.2. Label elements**

**Pictogram**



**Signal word**

**Danger**

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<b>Hazard statements</b>	H317 May cause an allergic skin reaction. H302+H312 Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H361 Suspected of damaging fertility or the unborn child. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P260 Do not breathe vapour/ spray. P270 Do not eat, drink or smoke when using this product. 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.
<b>Contains</b>	DIETHYLENETRIAMINE, TRIETHYLENETETRAMINE, 4,4'-ISOPROPYLIDENEDIPHENOL
<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. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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. 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). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. 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>TRIETHYLENETETRAMINE</b>		<b>30-60%</b>
CAS number: 112-24-3	EC number: 203-950-6	REACH registration number: 01-2119487919-13-0000
<b>Classification</b>		
Acute Tox. 4 - H312		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		

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<b>DIETHYLENETRIAMINE</b>		<b>30-60%</b>
CAS number: 111-40-0	EC number: 203-865-4	REACH registration number: 01-2119473793-27-0000
<b>Classification</b>		
Acute Tox. 4 - H302		
Acute Tox. 4 - H312		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
<b>4,4'-ISOPROPYLIDENEDIPHENOL</b>		<b>10-30%</b>
CAS number: 80-05-7	EC number: 201-245-8	REACH registration number: 01-2119457856-23-0000
<b>Classification</b>		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Repr. 2 - H361f		
STOT SE 3 - H335		

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>General information</b>	Avoid 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 immediately.
<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 the following media: Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemicals.
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#### 5.2. Special hazards arising from the substance or mixture

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**Specific hazards** In case of fire, toxic and corrosive gases may be formed.

### 5.3. Advice for firefighters

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

**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** Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapours/spray and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up** 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.

### 6.4. Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Use only in well-ventilated areas. Handle and open container with care. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Avoid inhalation of vapours/spray and contact with skin and eyes. Corrosive. Prolonged contact causes serious eye and tissue damage. Do not eat, drink or smoke when using the product. Do not use in confined spaces without adequate ventilation and/or respirator.

### 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

#### DIETHYLENETRIAMINE

Long-term exposure limit (8-hour TWA): WEL 1 ppm(Sk) 4.3 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

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**Ingredient comments** WEL = Workplace Exposure Limits

### TRIETHYLENETETRAMINE (CAS: 112-24-3)

#### DNEL

Workers - Inhalation; Long term systemic effects: 1 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term systemic effects: 5380 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 0.57 mg/kg/day

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

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

Use protective gloves. It is recommended that gloves are made of the following material: Neoprene. It is recommended that gloves are made of the following material: Butyl rubber. It is recommended that gloves are made of the following material: Nitrile 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. 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. 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

Appearance	Liquid.
Colour	Black.
Odour	Ammonia.
pH	pH (diluted solution): 11.1 5% soln
Melting point	N/D°C
Initial boiling point and range	>232.22°C @
Flash point	>93.3°C
Evaporation rate	<<1 (BuAc=1)

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Vapour pressure	<0.05mmHg @ °C
Vapour density	>1
Relative density	1.06 @ °C
Solubility(ies)	Soluble in water.

### 9.2. Other information

Volatility	<25 g/L
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	Strong oxidising agents. Acids. Inorganic nitrates. Organic peroxides/hydroperoxides.
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### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not available.
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### 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.
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### 10.5. Incompatible materials

Materials to avoid	Avoid contact with oxidising agents. Acids. Inorganic nitrates. Organic peroxides/hydroperoxides. Inorganic peroxides.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	Fire or high temperatures create: Nitrous gases (NO <sub>x</sub> ). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Vapours/gases/fumes of: Ammonia or amines. Aldehydes. Nitric acid (HNO <sub>3</sub> ).
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

ATE oral (mg/kg)	500.0
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#### Acute toxicity - dermal

ATE dermal (mg/kg)	1,100.0
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#### General information

Corrosive. Prolonged contact causes serious eye and tissue damage. Possible risk of impaired fertility.

#### Inhalation

Irritating to respiratory system.

#### Ingestion

May cause discomfort if swallowed. Corrosive. Small amounts may cause serious damage.

#### Skin contact

Corrosive. Prolonged contact causes serious tissue damage. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.

#### Eye contact

This product is strongly corrosive. Causes severe burns. Immediate first aid is imperative.

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**Acute and chronic health hazards** Possible risk of impaired fertility.

### SECTION 12: Ecological Information

**Ecotoxicity** Avoid release to the environment. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 332mg/L (Pimephales promelas) mg/l, Algae

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 17mg/l ( Daphnia magna) mg/l, Daphnia magna

#### 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 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

**UN No. (ADR/RID)** 3267

**UN No. (IMDG)** 3267

**UN No. (ICAO)** 3267

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

**Proper shipping name (IMDG)** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

**Proper shipping name (ICAO)** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

**Proper shipping name (ADN)** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

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### 14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID label	8
IMDG class	8
ICAO class/division	8

#### Transport labels



### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

### 14.5. Environmental hazards

### 14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
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 No information required.

## 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	06/04/2018
Revision	8
Supersedes date	06/05/2016



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### Hazard statements in full

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H361 Suspected of damaging fertility or the unborn child.  
H361f Suspected of damaging fertility.  
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.