

## 1. Substance/preparation and manufacturer/supplier identification

### DRI-POXY EP-178 – PART B

Use: Product for construction chemicals

v3 12-06-2017

Manufacturer/supplier:

DRITECH CHEMICALS SDN. BHD.  
A-13-02, Atria SOFO Suite, Jalan SS 22/23,  
Damansara Jaya, 47400, Petaling Jaya,  
Selangor, Malaysia.  
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Emergency information:

Emergency Advice Number: +60 3 9212 8510

## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

#### HAZARD STATEMENTS

Corrosive to the respiratory tract	EUH071
Hazardous to the aquatic environment, Chronic, category 2	H411
Reproductive Toxicity, category 2	H361
Respiratory Sensitizer, category 1	H334
Skin Corrosion, category 1B	H314-1B
Skin Sensitizer, category 1	H317

### 2.2 Label elements

#### Symbol(s) of Product



#### Signal Word

Danger

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## Named Chemicals on Label

4-tert-butylphenol, Ethylenediamine, m-Phenylenebis(methylamine), Trimethylhexane-1,6-diamine

### HAZARD STATEMENTS

Corrosive to the respiratory tract	EUH071	Corrosive to the respiratory tract.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Corrosion, category 1B	H314-1B	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

### PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304	IF INHALED:
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P391	Collect spillage.

## 2.3 Other hazards

No Information

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

## 3. Composition/information on ingredients

### 3.2 Mixtures

### Hazardous Ingredients

<u>CAS-No.</u>	<u>EINEC No.</u>	<u>Name According to EEC</u>	<u>%</u>		
68413-28-5			25-50		
98-54-4	202-679-0	4-tert-butylphenol	2.5-10		
1477-55-0	216-032-5	m-Phenylenebis(methylamine)	2.5-10		
25620-58-0	247-134-8	Trimethylhexane-1,6-diamine	1.0-2.5		
107-15-3	203-468-6	Ethylenediamine	1.0-2.5		
<u>CAS-No.</u>	<u>REACH Reg No.</u>	<u>CLP Symbols</u>	<u>CLP Hazard Statements</u>	<u>M-Factors</u>	
68413-28-5	-				
98-54-4	01-2119489419-21	GHS05-GHS07-GHS08-GHS09	H302-315-318-335-361-410		
1477-55-0	01-2119480150-50	GHS05-GHS07	H302-314-317-332-412		
25620-58-0	01-2119560598-25	GHS05-GHS07	H302-314-317-412		
107-15-3	01-2119480383-37	GHS02-GHS05-GHS06-GHS08	H226-302-311-314-317-334		

### 4. First-Aid Measures

**General advice:**

First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing.

**If inhaled:**

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

**On skin contact:**

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

**On contact with eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**On ingestion:**

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

**Note to physician:**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## 5. Fire-Fighting Measures

Suitable extinguishing media:  
foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

Specific hazards:  
carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

Special protective equipment:  
Wear a self-contained breathing apparatus.

Further information:  
The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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## 6. Accidental Release Measures

Personal precautions:  
Do not breathe vapour/aerosol/spray mists. Wear eye/face protection. If exposed to high vapour concentration, leave area immediately. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions:  
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:  
For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed. For large amounts: Pump off product.

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## 7. Handling and Storage

### Handling

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

### Storage

Further information on storage conditions: Keep only in the original container in a cool, dry, wellventilated place away from ignition sources, heat or flame. Protect from direct sunlight.

Protect from temperatures below: 5 °C The packed product must be protected from temperatures below the indicated one. Protect from temperatures above: 30 °C With longer exceeding of the indicated temperature packagings may be damaged.

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## 8. Exposure controls and personal protection

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## 8.1 Control parameters

### Ingredients with Occupational Exposure Limits (UK WELS)

Name	CAS-No.	LEL ppm	STEL ppm	STEL mg/m3	LEL mg/m3
OEL Note					
68413-28-5					
4-tert-butylphenol	98-54-4				
m-Phenylenebis(methylamine)	1477-55-0				
Trimethylhexane-1,6-diamine	25620-58-0				
Ethylenediamine	107-15-3				

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

## 8.2 Exposure controls

### Personal Protection

**RESPIRATORY PROTECTION:** In case of insufficient ventilation wear suitable respiratory equipment. Respirator with filter for organic vapor.

**EYE PROTECTION:** Eye wash bottle with pure water. Tightly fitting safety goggles. Face-shield.

**HAND PROTECTION:** Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.

**OTHER PROTECTIVE EQUIPMENT:** No Information

**ENGINEERING CONTROLS:** As a rule, at least 5 air changes per hour are recommended at the workplace. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

### Chemical Name:

m-Phenylenebis(methylamine)

EC No.: CAS-No.: 216-032-5 1477-55-0

### DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation			0.2 mg/m <sup>3</sup>	1.2 mg/m <sup>3</sup>				
Dermal				0.33 mg/kg bw/d				

### PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.094 mg/l
Fresh water sediments	0.43 mg/kg
Marine water	0.0094 mg/l
Marine sediments	0.043 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/l

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soil (agricultural)

0.045 mg/kg

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Amber & Various Colours
Physical State	Paste
Odor	Amine like
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	116 - N.D.
Flash Point, (°C)	>100
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	999 - 0
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	ca. 1.33
Solubility in / Miscibility with water	Insoluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined
9.2 Other information	
VOC Content g/l:	<10

## 10. Stability and Reactivity

Conditions to avoid:  
See MSDS section 7 - Handling and storage.

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Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:  
strong acids, strong bases, strong oxidizing agents, strong reducing agents

Corrosion to metals: Corrosive effects to metal are not anticipated.

Hazardous reactions:  
The product is stable if stored and handled as prescribed/indicated.

No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. Toxicological Information

### 11.1 Information on toxicological effects Acute Toxicity:

Oral LD50: No Information

Inhalation LC50: No Information

**Irritation:** Irritating to eyes and skin. Vapour/spray mist may irritate respiratory system and lungs.

**Corrosivity:** No information available.

**Sensitization:** Prolonged or repeated skin contact may result in allergic eczema.

**Repeated dose toxicity:** No information available.

**Carcinogenicity:** No information available.

**Mutagenicity:** No information available.

**Toxicity for reproduction:** No information available.

**STOT-single exposure:** No information available.

**STOT-repeated exposure:** No information available.

**Aspiration hazard:** No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
98-54-4	4-tert-butylphenol	1500 mg/kg	5600 mg/kg	
1477-55-0	m-Phenylenebis(methylamine)	1514 mg/kg	2001 mg/kg (rabbit)	
25620-58-0	Trimethylhexane-1,6-diamine	910 mg/kg, oral, rat		
107-15-3	Ethylenediamine	500 mg/kg (rat)	730 mg/kg (rat)	

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## Additional Information:

In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Corrosive - causes irreversible eye damage.

## 12. Ecological Information

### 12.1 Toxicity:

EC50 48hr (Daphnia): No information IC50 72hr (Algae): No information  
LC50 96hr (fish): No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII. assessment:

12.6 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
68413-28-5 information		No information	No information	No
98-54-4	4-tert-butylphenol	No information	No information	
1477-55-0	m-Phenylenebis(methylamine) idus)	15.2 mg/l	12 mg/175 mg/l (Leuciscus	
25620-58-0	Trimethylhexane-1,6-diamine	No information	29.5 mg/L	
107-15-3	Ethylenediamine	No information	No information	

### Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

<u>CAS-No.</u>	<u>Name According to EEC</u>
1477-55-0	m-Phenylenebis(methylamine)
25620-58-0	Trimethylhexane-1,6-diamine

## 13. Disposal Considerations

Observe national and local legal requirements.  
Residues should be disposed of in the same manner as the substance/product.



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Contaminated packaging:  
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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## 14. Transport Information

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14.1 UN number	UN2735
14.2 UN proper shipping name	Amines, liquid, corrosive, N.O.S.
Technical name	(m-Xylene diamine and Trimethylhexamethylenediamine)
14.3 Transport hazard class(es)	8
Subsidiary shipping hazard	No Information
14.4 Packing group	III
14.5 Environmental hazards	Marine Pollutant
14.6 Special precautions for user	Not applicable
EmS-No.:	No Information
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

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## 15. Regulatory Information

Safety, health, and environmental regulations specific for the hazardous chemical International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Not applicable

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

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## 16. Other Information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.