



# SAFETY DATA SHEET

## THOR EPOXY HARDENER

Revision 0  
Revision date 13-Apr-2010

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

**Product name** THOR EPOXY HARDENER  
**Company** Wykamol Group Limited  
Unit 3, Boran Court  
Network 65 Business Park  
Hapton, Burnley  
Lancashire. BB11 5TH  
sales@wykamol.com www.wykamol.com  
**Telephone** 0845 400 6666  
**Emergency telephone number** 0845 400 6666

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients	Conc.	CAS	EINECS	Symbols/Risk phrases
diethylenetriamine (2,2'-iminodi(ethylamine))	1 - 10%	111-40-0	203-865-4	Xn; R21/22 C; R34 R43
Triphenyl phosphite	10 - 20%	101-02-0	202-908-4	Xi; R36/38 N; R50/53
Alkylated polyamine adduct	30 - 40%			Xn; R21/22 C; R34 R43

### 3. HAZARDS IDENTIFICATION

**Main hazards** Harmful in contact with skin and if swallowed. Causes burns. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST AID MEASURES

**Skin contact** Wash with plenty of soap and water.  
**Eye contact** Wash out with water for several minutes and seek medical advice.  
**Inhalation** Remove to fresh air. If symptoms persist, seek medical advice.  
**Ingestion** Give plenty of water - if possible, charcoal slurry. Do not induce vomiting.  
**General information** Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Dry powder, fog or foam. For small fires use CO2. DO NOT use halones.  
**Fire hazards** Toxic and irritant fumes may be produced.  
**Protective equipment** Full protective equipment.

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear suitable protective clothing appropriate to the amount involved, which may include eye / face protection, PVC or synthetic rubber gloves, protective footwear and overalls.
Environmental precautions	Do not allow to enter public sewers and watercourses. If this cannot be avoided, inform the appropriate authority.
Clean up methods	Absorb in dry sand, earth or similar absorbent and shovel into a suitable closed container for disposal according to section 13.

## 7. HANDLING AND STORAGE

Handling	Ensure adequate ventilation in work areas. Keep away from heat and sources of ignition. Do not break open the dispenser cartridge.
Storage	Keep containers tightly closed in a cool place, out of direct sunlight. Keep stored well ventilated. Keep away from food and feeding stuffs.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits	None prescribed in EH 40.	
diethylenetriamine (2,2'-Iminodi(ethylamine))	WEL 8-hr limit ppm: 1 WEL 15 min limit ppm: -	WEL 8-hr limit mg/m3: 4.3 WEL 15 min limit mg/m3: -
Hand protection	Wear PVC or synthetic / rubber gloves.	
Eye protection	Wear eye protection.	
Protective equipment	Wear protective clothing. Wash hands and exposed skin before meals and after work. Do not eat or drink whilst handling the product.	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Paste.
Colour	Red.
Odour	Amine like. pH > 7 (in water)
Boiling point	Decomposes °C
Flash point	> 100 (cc) °C
Explosive	No data available
Oxidising	None
Vapour pressure	No data available
Relative density	1.2 (25°C)
Water solubility	Partially miscible with water.
Viscosity	No data available
Melting point	n / a °C
Autoignition temperature	No data available

## 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use.
Conditions to avoid	High temperatures, formation of aerosols and static discharges.
Materials to avoid	Strong oxidising agents, acids and bases.

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**11. TOXICOLOGICAL INFORMATION**

## Toxicological information

THOR EPOXY HARDENER

Oral Rat LD50 = &gt; 5000 mg/kg

**12. ECOLOGICAL INFORMATION**

Ecotoxicity Toxic to aquatic organisms.  
Mobility Likely to be mobile in soil.  
Degradability Readily biodegradable.  
Bioaccumulation There is little potential for bioaccumulation. Biomagnification is unlikely.

**13. DISPOSAL CONSIDERATIONS**

Disposal methods Chemical residues are normally regarded as Special Waste. Incinerate in compliance with the Environmental Protection Act 1990 (Process Guidance Note IPR5 / 1).  
Disposal of packaging As for the product.

**14. TRANSPORT INFORMATION**

## ADR/RID

UN 2327	Packing group III
Class 8	Hazard ID 80
Proper Shipping Name TRIMETHYLHEXAMETHYLENE DIAMINE .	

## IMDG

UN 2327	Packing group III
Class 8	Marine pollutant NO
EmS Code F-A S-B	


## IATA

UN 2327	Packing group III
Class 8	Subsidiary risk -
Packing Instruction 820 (Cargo)	Maximum quantity 60 L
Packing Instruction 818 (Passenger)	Maximum quantity 5 L

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## 15. REGULATORY INFORMATION

<b>Symbols</b>	<b>C - Corrosive; N - Dangerous for the environment</b>
	
<b>Risk phrases</b>	<p><b>R22 - Harmful if swallowed.</b></p> <p><b>R21/22 - Harmful in contact with skin and if swallowed.</b></p> <p><b>R34 - Causes burns.</b></p> <p><b>R43 - May cause sensitisation by skin contact.</b></p> <p><b>R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</b></p>
<b>Safety phrases</b>	<p><b>S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</b></p> <p><b>S24 - Avoid contact with skin.</b></p> <p><b>S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</b></p> <p><b>S28 - After contact with skin, wash immediately with plenty of [].</b></p> <p><b>S29 - Do not empty into drains.</b></p> <p><b>S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.</b></p> <p><b>S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</b></p>
<b>Further information</b>	<p><b>Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.</b></p>

## 16. OTHER INFORMATION

<b>Text of risk phrases in Section 2</b>	<p><b>R21/22 - Harmful in contact with skin and if swallowed.</b></p> <p><b>R34 - Causes burns.</b></p> <p><b>R36/38 - Irritating to eyes and skin.</b></p> <p><b>R43 - May cause sensitisation by skin contact.</b></p> <p><b>R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</b></p>
<b>General information</b>	<p><b>Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.</b></p>



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## THOR EPOXY RESIN

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### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

**Product name** THOR EPOXY RESIN  
**Company** Wykamol Group Limited  
Unit 3, Boran Court  
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Hapton, Burnley  
Lancashire. BB11 5TH  
sales@wykamol.com www.wykamol.com  
**Telephone** 0845 400 6666  
**Emergency telephone number** 0845 400 6666

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients	Conc.	CAS	EINECS	Symbols/Risk phrases
Bisphenol A and F epoxy resins	50 - 60%	25068-38-6	500-033-5	Xi; R36/37/38 R43 N; R51/53

### 3. HAZARDS IDENTIFICATION

**Main hazards** Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. FIRST AID MEASURES

**Skin contact** Wash with plenty of soap and water.  
**Eye contact** Wash out with water for several minutes and seek medical advice.  
**Inhalation** Remove to fresh air if fumes cause irritation of nose or throat.  
**Ingestion** Seek medical advice in the event of discomfort.  
**General information** May aggravate existing respiratory problems.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Dry powder or foam. For small fires use CO2. Never use water jets.  
**Protective equipment** For fires in confined spaces use breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** Wear suitable protective clothing appropriate to the amount involved, which may include eye / face protection, PVC or synthetic rubber gloves, protective footwear and overalls.  
**Environmental precautions** Do not allow to enter public sewers and watercourses. If this cannot be avoided, inform the appropriate authority.  
**Clean up methods** Absorb in dry sand, earth or similar absorbent and shovel into a suitable closed container for disposal according to section 13.

# THOR EPOXY RESIN

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## 7. HANDLING AND STORAGE

Handling	Observe good hygiene standards and minimise skin contact. Wear suitable protective clothing according to section 8. Avoid open flames and sources of ignition.
Storage	Keep containers tightly closed in a cool place, out of direct sunlight. Keep stored well ventilated.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits	None prescribed in EH 40. Slight irritation, not considered hazardous.
Protective equipment	Where prolonged or repeated exposure is likely, protective clothing should be worn, including eye protection and PVC or synthetic rubber gloves. Wash hands and exposed skin before meals and after work. Do not eat or drink whilst handling the product. Do not wear contaminated clothing. Ventilate confined spaces thoroughly.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Thixotropic liquid.
Colour	Beige.
Odour	Faint.
pH	7 (50% suspension in water)
Boiling point	Decomposes °C
Flash point	> 150°C
Explosive	No data available
Oxidising	None
Vapour pressure	1 Pa (20°C)
Relative density	1.7 (25°C)
Water solubility	insoluble in water.
Partition coefficient	No data available
Viscosity	No data available
Autoignition temperature	No data available

## 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use.
Conditions to avoid	High temperatures (degrades resin).
Materials to avoid	Strong oxidising agents, strong acids and bases. Excess of hardener (uncontrolled polymerisation reaction).

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity	No data available on acute toxicity. Irritating to eyes and is a mild skin irritant.
Sensitization	A mild sensitising agent.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxic to aquatic organisms.
Mobility	Low soil absorption.
Degradability	Not easily biodegradable.
Bioaccumulation	There is potential for bioaccumulation. Biomagnification is unlikely.

# THOR EPOXY RESIN

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## 13. DISPOSAL CONSIDERATIONS

**Disposal methods** Chemical residues are normally regarded as Special Waste. Dispose of in accordance with local and national regulations (incinerate or landfill).

**Disposal of packaging** Uncleaned packaging should be treated as for the product.

## 14. TRANSPORT INFORMATION

**ADR/RID** Not classified as hazardous.  
**Proper Shipping Name** Liquid Epoxy Resin

**IMDG** Not classified as hazardous.

**IATA** Not classified as hazardous.

**Further information** No hazard label.

## 15. REGULATORY INFORMATION

**Symbols** Xi - Irritant; N - Dangerous for the environment



**Risk phrases** R36/38 - Irritating to eyes and skin.  
R43 - May cause sensitisation by skin contact.  
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** S24 - Avoid contact with skin.  
S29 - Do not empty into drains.  
S37 - Wear suitable gloves.

## 16. OTHER INFORMATION

**Text of risk phrases in Section 2**

R36/37/38 - Irritating to eyes, respiratory system and skin. R43 - May cause sensitisation by skin contact.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.