



**SAFETY DATA SHEET**  
**EXPANSION JOINT COMPOUND RED & GREY HARDENER**

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

**1.1. Product identifier**

**Product name** EXPANSION JOINT COMPOUND RED & GREY HARDENER  
**Product number** Y0024

**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 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 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317  
**Environmental hazards** Aquatic Chronic 3 - H412  
**Human health** Corrosive. Prolonged contact causes serious eye and tissue damage.

**2.2. Label elements**

**Pictogram**



**Signal word**

Danger

## EXPANSION JOINT COMPOUND RED & GREY HARDENER

<b>Hazard statements</b>	H302+H312 Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
<b>Contains</b>	2-PIPERAZIN-1-YLETHYLAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL
<b>Supplementary precautionary statements</b>	P260 Do not breathe vapour/ spray. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/ doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. 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>2-PIPERAZIN-1-YLETHYLAMINE</b>			<b>60-100%</b>
CAS number: 140-31-8	EC number: 205-411-0	REACH registration number: 01-2119471486-30-0003	
<b>Classification</b>			
Acute Tox. 4 - H302			
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>2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL</b>	<b>10-30%</b>
CAS number: 90-72-2	EC number: 202-013-9
<b>Classification</b> Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	

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 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>	Corrosive. Small amounts may cause serious damage. Do not induce vomiting. Give a few small glasses of water or milk to drink. Never give anything by mouth to an unconscious person. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin 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. Continue to rinse for at least 15 minutes. 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>	Avoid breathing fire gases or vapours.
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#### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses. Do not use water jet as an extinguisher, as this will spread the fire.
<b>Special protective equipment for firefighters</b>	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

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**Personal precautions** Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Do not breathe vapour. Avoid contact with skin and eyes. No smoking, sparks, flames or other sources of ignition near spillage.

### 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. Avoid contact with skin and eyes. Avoid inhalation of vapours. Eliminate all sources of ignition. Do not use in confined spaces without adequate ventilation and/or respirator. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

### 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

**Ingredient comments** No exposure limits known for ingredient(s).

#### 2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

**DNEL**

Workers - Inhalation; Long term systemic effects: 3.6 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term systemic effects: 21.4 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 3.3 mg/kg/day  
 Workers - Dermal; Long term systemic effects: 20 mg/kg/day  
 Workers - Dermal; Long term local effects: 0.006 mg/cm<sup>2</sup>

### 8.2. Exposure controls

**Protective equipment**



**Appropriate engineering controls**

Provide adequate general and local exhaust ventilation.

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<b>Eye/face protection</b>	The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
<b>Hand protection</b>	Use protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. It is recommended that gloves are made of the following material: Butyl rubber. It is recommended that gloves are made of the following material: Neoprene. 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.
<b>Other skin and body protection</b>	Wear chemical protective suit.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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>	Liquid.
<b>Colour</b>	Amber.
<b>Odour</b>	Fishy.
<b>pH</b>	pH (diluted solution): 10.5-11.5 (5% Soln)
<b>Melting point</b>	N/D°C
<b>Initial boiling point and range</b>	>221°C @
<b>Flash point</b>	135°C PMCC (Pensky-Martens closed cup).
<b>Evaporation rate</b>	<1 ( BuAc= 1)
<b>Vapour pressure</b>	<3mmHg @ °C
<b>Vapour density</b>	>1
<b>Relative density</b>	0.99 @ 20 °C°C
<b>Solubility(ies)</b>	Soluble in water.

#### 9.2. Other information

<b>Other information</b>	Not available.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	Strong oxidising agents. Acids. Organic peroxides/hydroperoxides.
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#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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## EXPANSION JOINT COMPOUND RED & GREY HARDENER

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Will not polymerise.

### 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. Acids. Nitrous acid and other nitrosating agents. Organic peroxides/hydroperoxides. Inorganic peroxides.

### 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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**ATE oral (mg/kg)** 588.24

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 1,294.12

**Inhalation** Vapour may irritate respiratory system/lungs. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

**Ingestion** Corrosive. Small amounts may cause serious damage.

**Skin contact** May be absorbed through the skin. Causes burns. Corrosive. Prolonged contact causes serious tissue damage. May cause sensitisation by skin contact.

**Eye contact** Causes burns. Risk of serious damage to eyes. A single exposure may cause the following adverse effects: Corneal damage.

**Acute and chronic health hazards** This product is corrosive. This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.

**Route of entry** Inhalation Ingestion. Skin absorption

### 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

#### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 2,169.0

**Species** Rat

## SECTION 12: Ecological Information

**Ecotoxicity** Avoid release to the environment. The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### 12.1. Toxicity

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**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 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)** 2735

**UN No. (IMDG)** 2735

**UN No. (ICAO)** 2735

**UN No. (ADN)** 2735

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOETHYLPIPERAZINE & 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

**Proper shipping name (IMDG)** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOETHYLPIPERAZINE & 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

**Proper shipping name (ICAO)** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOETHYLPIPERAZINE & 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

**Proper shipping name (ADN)** AMINES, LIQUID, CORROSIVE, N.O.S. (AMINOETHYLPIPERAZINE & 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

### 14.3. Transport hazard class(es)

**ADR/RID class** 8

**ADR/RID classification code** C7

**ADR/RID label** 8

## EXPANSION JOINT COMPOUND RED & GREY HARDENER

IMDG class	8
ICAO class/division	8
ADN class	8

### Transport labels



### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3
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

#### 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	11
Supersedes date	31/05/2017



## EXPANSION JOINT COMPOUND RED & GREY HARDENER

### 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.

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.