



FRASER BROWN & STRATMORE LTD.

Products for Concrete and Construction

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INVINCIBLE

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MATERIAL SAFETY DATA SHEET

PRODUCT: EPAR 121T HARDENER

CHEMICAL FAMILY: Cycloaliphatic Amine (modified Isophorone Diamine)

| SECTION A | IDENTIFICATION | EPAR 121T HARDENER |
|-------------------------|--------------------------|--------------------|
| UN NUMBER | 1760 | |
| NZ DANGEROUS GOOD CLASS | 8, 6.1 | |
| PROPER SHIPPING NAME | CORROSIVE LIQUID, N.O.S. | |
| PACKAGING GROUP | II | |
| HAZCHEM | 2X | |

| SECTION B | HAZARDOUS INGREDIENTS | EPAR 121T HARDENER |
|---|-----------------------|--------------------|
| Name | CAS Number | Content |
| TAR | 68996-89-6 | 70 – 80% |
| CRESYLIC ACID | 1319-77-3 | 5 – 8% |
| 1,2-Ethanediamine, N,N'-bis-(2-aminoethyl)- | 112-24-3 | 15 – 20% |

| SECTION C | PHYSICAL DATA | EPAR 121T HARDENER |
|-------------------------|---|--------------------|
| SOLUBILITY IN WATER | Slight | |
| VAPOR DENSITY (Air = 1) | — | |
| BOILING POINT IN DEGS C | >120 | |
| SPECIFIC GRAVITY | 1.125 | |
| PERCENT VOLATILES | Nil | |
| VISCOSITY | Liquid | |
| APPEARANCE AND ODOUR | Black, viscous liquid. Strong coal tar odour. | |

| SECTION D | FIRE AND EXPLOSION DATA | EPAR 121T HARDENER |
|-------------------------------|---|--------------------|
| FLASH POINT | >100°C | |
| UNUSUAL OR EXPLOSIVE HAZARDS: | Combustible. Keep away from all sources of ignition and heat. Use only in a well ventilated area. Flammable when exposed to flame, heat or oxidising substance. | |

SPECIAL FIREFIGHTING PROCEDURES AND UNUSUAL FIRE AND EXPLOSION HAZARDS

Coal tar products give off dense vapours when heated strongly. Vapours may cause headaches, dizziness, irregular breathing and confusion when inhaled. Contain water used for extinguishing. Firefighters should wear full protective clothing and self-contained breathing apparatus.

EXTINGUISHING MEDIA

Water mist, Dry chemical, Foam, Carbon dioxide.

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|------------|--|
| INGESTION | Harmful if swallowed. |
| INHALATION | Avoid inhalation. Vapours are likely to cause irritation and may cause burning sensation of the nose and throat. Use only in well-ventilated area. Wear a respirator. When mixed with Resin, avoid vapours during curing period. |
| CONTACT | Avoid all skin contact. Can burn skin. Contact with liquid or fume may cause photosensitivity of skin areas and sunburn on subsequent exposure to UV alpha rays. May cause local discomfort or pain, redness and swelling following contact. Can cause severe eye irritation/burns, experienced as discomfort or pain, excess blinking and tear production, marked excess redness. May cause skin sensitisation and aggravate existing dermatitis. |

FIRST AID:

In all cases of suspected poisoning, seek medical aid at once. In the interim, the following first aid measures are appropriate.

| | |
|--------------|---|
| INHALATION | Remove injured person to fresh air. In case of irritation of respiratory system or mucous membranes, or if feeling unwell or prolonged exposure, seek medical attention. |
| SWALLOWED | DO NOT induce vomiting. Immediately rinse out mouth & drink 500 – 800ml water/milk or vegetable oil. In case of vomiting, give water repeatedly. Do not give anything by mouth if unconscious. Obtain medical attention immediately. |
| EYE CONTACT | Hold eyelids apart and immediately flush thoroughly with plenty of water for at least 15 minutes. Seek medical attention. |
| SKIN CONTACT | Wash off with copious amounts of warm soap and water – use a facecloth. Remove contaminated clothing. Apply broad-spectrum UV blockout cream to affected areas and keep out of sun. If irritation occurs or a large area is affected, seek medical attention. |

If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

IN CASE OF FIRE USE EXTINGUISHING AGENTS RECOMMENDED.

EMERGENCY CONTACT NUMBER

Poisons & Hazardous Chemicals, urgent information only (03) 474 7000

STABILITY

Stable.

MATERIALS TO AVOID

Avoid uncontrolled reaction with epoxy resins and acids. Avoid mixing large amounts of Hardener with epoxy resin. Avoid static discharges. Heating may cause volatile flammable vapours to be given off.

HAZARDOUS COMBUSTION PRODUCTS

Thermal decomposition or burning may release oxides of carbon, nitrogen and other toxic gases or vapours.

HAZARDOUS POLYMERIZATION

None known.

STEPS TO BE TAKEN WHEN MATERIAL IS SPILLED OR RELEASED

In case of spill, wear protective equipment as described in section H. Stop leak if no risk involved. Soak up liquid with an absorbent material such as sand, earth, sweeping compound or other absorbent material. Package absorbent material or solid product in steel drums that are in good condition.

Thoroughly clean area where spill occurred. Do not allow material to enter drains or surface water.

WASTE DISPOSAL METHOD

Dispose of in accordance with local rules. Bail or pump any free liquid into metal container. Remaining layers of thin tar should be soaked up using sand, etc. Contaminated earth should be shovelled up and bumped and buried at recognised locations in accordance with local regulations. Be aware that local requirements may differ widely depending on location and may in many cases be different from national rules.

ENVIRONMENTAL INFORMATION

Hazardous to aquatic organisms. Prevent contamination of soil, drains and surface waters. Absorb any spilt material with sand, earth, sawdust, etc.

VENTILATION

Local exhaust is preferred to keep exposure limits low. Mechanical area wide ventilation is acceptable. If this product is to be used in an area of poor ventilation, a full or half facemask, with a filter suitable to provide protection from organic gases and vapours, should be worn. If oxygen content of air is low, use air supplied regulator.

PROTECTIVE GLOVES & CLOTHING

Protective clothing such as overalls must be worn. Wear PVC apron if there is a risk of splash. Wear PVC gloves, impervious to chemicals, preferably long. Wear rubber boots. Remove and launder clothing soaked or soiled with this material before re-use.

EYE PROTECTION

Wear suitable chemical goggles or face protection.

OTHER PROTECTION

Use barrier cream on exposed areas of skin. Avoid all skin contact. After working with product, use warm soapy water and washcloth to thoroughly wash all areas of skin that has been in contact with product. After washing, apply broad-spectrum UV block or lotion before exposure to sunlight. Keep out of strong sunlight for several days where possible if affected by this product.

PRECAUTIONS FOR HANDLING AND STORING

Store in a cool location (10-25 degrees C) away from incompatible materials. Keep container tightly closed when not being used. Store away from food and drink.

NOT TO BE USED IN AREAS CONTAINING FOOD. CURED EPOXY NOT TO BE USED IN AREAS IN CONTACT WITH FOOD OR FOODSTUFFS.

OTHER PRECAUTIONS

Causes eye and skin burns. Harmful and corrosive if swallowed. Avoid all skin contact. Use only in areas with good ventilation. Avoid breathing vapour. Always wear safety gear when using this product. Wash hands after use. Do not smoke or eat while handling this product. **FOR COMMERCIAL USERS ONLY.**

IMPORTANT NOTICE:

The above recommendations are intended for the assistance of users and are of a general nature. They are based on our experience and judgement and data believed to be reliable but because the conditions under which, and the materials with which our products are used, are beyond our control our recommendations must not be regarded as amounting to legal warranty or as involving any liability on us.