
MATERIALS SAFETY DATA SHEET

WEAR RESISTANT CERAMIC PUTTY

PART A

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: TUFFY TURBO WEAR RESISTANT PUTTY – PART A
PRODUCT CODE: TF07

SUPPLIER: Tuff Stuff Technologies Pty Ltd
ABN: 46 130 510 315 | ACN: 130510315
63 Daraya Rd Blacktown, 2148
Phone/Fax: 1300 45 99 39
Email: Sales@tuffstufftech.com | Web: www.tuffstufftech.com

Emergency Phone: 1300 45 99 39

2. HAZARD IDENTIFICATION

HAZARDOUS SUBSTANCE NON DANGEROUS GOODS
(According to the criteria of NOHSC and ADG Code 6)

Signal Word: Xi; irritant;
Risk Phrases: R36/R38; irritating to respiratory system eyes and skin
R43 mass cause sensitisation by skin contact

D.G. Class: Not classed as a dangerous goods

Subsidiary Risk: Nil

Poisons Schedule: S5

Safety Phrases: S24/25 Avoid contact with skin and eyes
S28 After contact with skin wash with soap and water
S37/39 Wear suitable eye/face protection and gloves
S61 Avoid release into the environment. Refer to special instruction/safety data sheets.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name:	CAS RN	%
bisphenol A/ epichlorohydrin resin, liquid	25068-38-6	>60
Aliphatic Glycidyl Ether	68609-97-2	low
Other substances not determined to be hazardous		to 100%

V.High >60, High 30 - 60, Med 10 - 29, Low 1 - 9, V.Low <1

All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS) and National Registration Authority (NRA) approved active constituents.

4. FIRST AID MEASURES

GENERAL INFORMATION

Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately. Show label or this safety data sheet to doctor in attendance.

INHALATION

Move the exposed person to fresh air at once. Contact physician if discomfort continues.

INGESTION

Rinse mouth thoroughly, Do not induce vomiting. Rinse mouth with water. If vomiting occurs, the head should be kept low so that stomach vomit does not enter the lungs. Never make an unconscious person vomit or drink fluids. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. Wash skin thoroughly with soap and warm water for several minutes. Contact physician if irritation persists.

EYE CONTACT

Promptly wash eyes with plenty of clean water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA

Fire can be extinguished using: Alcohol resistant foam. Carbon Dioxide (CO₂). Dry Chemicals.

SPECIFIC HAZARDS

Avoid breathing fire vapours.

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SPECIAL FIRE FIGHTING PROCEDURES

Keep upwind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to flames with water until fire is out. Keep run-off water out of sewers and watercourses. Dike for water control.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb with sand or other inert absorbent. Transfer to a container for disposal. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

7. HANDLING AND STORAGE

PROCEDURE FOR HANDLING

DO NOT allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

SUITABLE CONTAINER

Metal can or drum. Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with amines, mercaptans, strong acids and oxidising agents.

STORAGE REQUIREMENTS

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



EXPOSURE CONTROLS

The following materials had no OELs as according to HSIS (Hazard Substance Information System):
bispfenol A/ epichlorohydrin resin, liquid: CAS:25068- 38- 6 CAS:25085- 99- 8.

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA. OSHA (USA) concluded that exposure to sensory irritants can: cause inflammation; cause increased susceptibility to other irritants and infectious agents; lead to permanent injury or dysfunction; permit greater absorption of hazardous substances and; acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

INGREDIENT DATA

BISPHENOL A/ EPICHLOROHYDRIN RESIN, LIQUID:

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However, this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA. OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and; acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

Odour Threshold Value for epichlorohydrin: 0.08 ppm

NOTE: Detector tubes for epichlorohydrin, measuring in excess of 5 ppm, are commercially available. Exposure at or below the recommended TLV-TWA is thought to minimise the potential for adverse respiratory, liver, kidney effects. Epichlorohydrin has been implicated as a human skin sensitiser, hence individuals who are hypersusceptible or otherwise unusually responsive to certain chemicals may NOT be adequately protected from adverse health effects. Odour Safety Factor(OSF) OSF=0.54 (EPICHLOROHYDRIN).

PERSONAL PROTECTION

EYE

Safety glasses with side shield. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDCNIOSH Current Intelligence Bulletin 59].

HANDS/FEET

When handling liquid-grade epoxy resins wear chemically protective gloves (e.g nitrile or nitrile-butatoluene rubber), boots and aprons. DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin). DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use. Suitability and durability of glove type is dependent on usage. Factors such as: frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity, are important in the selection of gloves. Wear chemical protective gloves, eg. PVC. Wear safety footwear or safety gumboots, eg. Rubber. NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

OTHER

Overalls; P.V.C. apron; Barrier cream; Skin cleansing cream; Eye wash unit.

ENGINEERING CONTROLS

Local exhaust ventilation usually required. If risk of overexposure exists, wear

approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

APPEARANCE:	Solid
COLOUR:	Brown
ODOUR:	Slight Odour.
SOLUBILITY:	Insoluble in water
BOILING POINT:	(°C) > 260 RELATIVE DENSITY 2.8 @ 20 °C
VAPOUR PRESSURE:	Not known
EVAPORATION RATE:	Not known
pH-VALUE:	CONC. SOLUTION 7.0 @ 20° C
FLASH POINT:	(°C) > 204
AUTO IGNITION TEMP:	(°C) > 300° C

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.
Reaction with hardener component will generate heat, mixing large volumes should be avoided.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Avoid contact with: Strong acids. Strong oxidising agents. Amines.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Nitrous gases (NO_x). Oxides of: Carbon monoxide (CO). Carbon dioxide (CO₂). Vapours/gases/fumes of: Acids – Organic, Aldehydes.

11. TOXICOLOGICAL INFORMATION

Name: EPOXY RESIN (Number Average MW ≤700)

Toxic Dose 1 - LD 50 >2000 mg/kg (oral rat)

Toxic Dose 2 - LD 50 >2000 mg/kg (oral rat)

INGESTION

May cause discomfort.

SKIN CONTACT

Irritating to skin. This product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact.

EYE CONTACT

May cause irritation to eyes.

HEALTH WARNINGS

This material contains epoxy resin, which may cause sensitisation and development of allergy.

ROUTE OF ENTRY:

Inhalation, Ingestion, Skin and/or eye contact.

12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ safety data sheets.

13. DISPOSAL INFORMATION

DISPOSAL METHODS

Mix resin and hardener components completely to create a nonhazardous solid that can be disposed as general waste. Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods by (ADG-6) (Australia).
International regulations (IMDG, IATA, ADR/RID):
DG CLASS: 9: Miscellaneous dangerous substances and articles,
SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))
UN NUMBER: 3082
PACK GROUP: III
Marine Pollutant: No.

15. REGULATORY INFORMATION

POISONS SCHEDULE: S5 (SUSDP).
This product is a Schedule Poison S 5 and must be stored, maintained and used in accordance with the relevant regulation.

16. OTHER INFORMATION

ISSUE DATE: 08 FEBRUARY 2010
CONTACT POINT: TECHNICAL CONTACT 1300 45 99 39

PART B

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: TUFFY TURBO WEAR RESISTANT PUTTY – PART B
PRODUCT CODE: TF07

SUPPLIER: Tuff Stuff Technologies Pty Ltd
ABN: 46 130 510 315 | ACN: 130510315
63 Daraya Rd Blacktown, 2148
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Email: Sales@tuffstufftech.com
Web: www.tuffstufftech.com

Emergency Phone: 1300 45 99 39

2. HAZARD IDENTIFICATION

Hazard Category:	Xi Irritant
Risk Phrases:	R36/38 Irritating to skin and eyes. R43 May cause sensitisation by skin contact.
D.G. Class:	Not classified as dangerous goods
Subsidiary Risk:	Nil
Poison Schedule:	S 5

This product is a Schedule Poison S 5 and must be stored, maintained and used in accordance with the relevant regulation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name:	CAS RN	%
Mercaptan Polymer	72244-98-5	Med
Other ingredients not determined to be hazardous		To 100%

V.High >60, High 30 - 60, Med 10 - 29, Low 1 - 9, V.Low <1

All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS) and National Registration Authority (NRA) approved active constituents.

4. FIRST AID MEASURES

SWALLOWED

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Transport to hospital or doctor without delay.

EYE

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin or hair contact occurs:

- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- Quickly remove all contaminated clothing, including footwear.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prosthesis such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor, without delay.

NOTES TO PHYSICIAN

Treat symptomatically. For acute or short-term repeated exposures to highly alkaline materials:

- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue. Alkalis continue to cause damage after exposure.

INGESTION:

- Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

- Neutralising agents should never be given since exothermic heat reaction may compound injury.

* Catharsis and emesis are absolutely contra-indicated.

* Activated charcoal does not absorb alkali.

* Gastric lavage should not be used.

Supportive care involves the following:

- Withhold oral feedings initially.
- If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

- Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]. If exposure has been severe and/or symptoms marked, observation in hospital for 48 hours should be considered due to possibility of delayed pulmonary oedema.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.
- Mists containing combustible materials may be explosive. Combustion products include, carbon dioxide (CO₂), nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material. May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT

Breathing apparatus.

Gas tight chemical resistant suit.

Limit exposure duration to 1 BA set - 30 mins.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Consider evacuation (or protect in place).
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.

- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
- If contamination of drains or waterways occurs, advise emergency services.

EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

7. HANDLING AND STORAGE

PROCEDURE FOR HANDLING

DO NOT allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

SUITABLE CONTAINER

Metal can or drum. Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with amines, mercaptans, strong acids and oxidising agents.

STORAGE REQUIREMENTS

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



EXPOSURE CONTROLS

No value assigned for this specific product by the National Occupational and Safety Commission (Worksafe Australia).

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	peak	peak
Worksafe Australia	Mercaptan Polymer	NA	NA	NA	NA		

PERSONAL PROTECTION

EYE

- Chemical goggles.
- Full face shield may be required for supplementary but never for primary protection of eyes
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

Elbow length PVC gloves.

Wear safety footwear. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

OTHER

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Ensure there is ready access to a safety shower.

RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Maximum Protection Half-face Full-Face
Level ppm (volume) Factor Respirator Respirator

1000 10 AK-AUS P -

1000 50 - AK-AUS P

5000 50 Airline * -

5000 100 - AK-2 P

10000 100 - AK-3 P

100+ Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

APPEARANCE

White/brwon; partly mixes with water.

PHYSICAL PROPERTIES

Liquid. Sulphur odour

Molecular Weight: Not Applicable Boiling Range (°C): >207

Melting Range (°C): Not Available Specific Gravity (water=1):

Solubility in water (g/L): Partly Miscible pH (as supplied): Not Applicable

pH (1% solution): Not Available Vapour Pressure (kPa): Not Available

Volatile Component (%vol): Not Available Evaporation Rate: Not Available

Relative Vapour Density (air=1): >1 Flash Point (°C): >200

Lower Explosive Limit (%): Not Available (%): Not Available

Autoignition Temp (°C): Not Available Decomposition Temp (°C): Not Available

State: Liquid

10. STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this MSDS and the product label. Symptoms that may arise if the product is mishandled are:

Acute Effects:

Ingestion:

Harmful if swallowed. May cause gastrointestinal discomfort and irritation.

Eye:

Brief contact may cause mild irritation to eyes.

Skin:

Mild irritant and poorly absorbed through the skin. Prolonged and repeated contact may cause sever irritation and/or dermatitis

Inhaled:

Not hazardous at ambient temperatures. Vapours generated at elevated temperatures or when inhaled repeatedly may cause irritation to nose, throat and respiratory tract.

Long Term Effects:

Repeated skin contact and inhalation may result in sensitisation in some individuals. May cause allergic reaction, dermatitis or asthma like symptoms. Follow good working practice. Avoid ingestion, inhalation, eye and skin contact. Wash hands with soap and water before eating, drinking, smoking or using toilet facilities.

Acute & Chronic

Negative in a battery of mutagenicity assays.

Toxicity:

No evidence of carcinogenicity was observed in long term studies of rats.

No developmental nor reproductive effects in rat and rabbit.

Acceptable Daily Intake (ADI) for humans is 0.01 mg/kg/day.

12. ECOLOGICAL INFORMATION

Avoid contamination with environment for drains, sewerage, creeks and waterways.

Product may be toxic to some marine and aquatic organisms.

13. DISPOSAL INFORMATION

DISPOSAL METHODS

Mix resin and hardener components completely to create a nonhazardous solid that can be disposed as general waste.

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

UN. No. :	Not Applicable
Shipping Name :	Not Applicable
Class :	Not classified as dangerous goods
Subsidiary Risk :	Not Applicable
Packaging Group :	Not Applicable
Hazchem Code :	Not Applicable
EPG :	Not Applicable
Segregation :	Not to be loaded with explosives, oxidising agents or organic peroxides.

For road, marine and air transport this product is not classified as dangerous goods within the context of National and International Transport Regulation.

15. REGULATORY INFORMATION

The National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC : 10005 (1999)].

The National Standard for the Storage and Handling of Workplace Dangerous Goods [NOHSC : 1015 (2001)].

16. OTHER INFORMATION

ISSUE DATE: 27 FEBRUARY 2010

CONTACT POINT: TECHNICAL CONTACT 1300 45 99 39