

MATERIAL SAFETY DATA SHEET**1) IDENTIFICATION OF PRODUCT AND COMPANY**

Product: Monoprufe SX 700 Part A
Intended use: Waterproofing Coatings
Supplier: Ronacrete (Far East) Limited
Telephone: +852 2865 5872
Facsimile: +852 2865 5568

2) COMPOSITION

	% by weight	CAS No
Diphenylmethane-4,4'-diisocyanate	48%	101-68-8
Diphenylmethane-2,4'-diisocyanate	7%	5873-54-1
Polyetherpolyol, branched	45%	9082-00-2

3) HAZARDS IDENTIFICATION

May be harmful if swallowed.
May be harmful if inhaled.
Causes mild skin irritation.
Causes eye irritation.
Other hazards:
If prolonged skin contact may produce redness.
If not carefully ingested, the stomach will produce irritation

4) FIRST AID MEASURES

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.

Skin Contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

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Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

5) FIRE FIGHTING MEASURES

Suitable fire extinguishing media: Foam, CO₂ or dry powder.
Specific hazards may be encountered during fire-fighting:
Combustion will produce smoke, carbon dioxide and carbon monoxide.
Specific fire-fighting methods:--
Specific equipment for the protection of fire-fighters:
Wear full protective clothing and self-contained breathing apparatus.

6) ACCIDENTAL RELEASE MEASURES

Personal Precautions:
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions:
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up:
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

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7) HANDLING AND STORAGE

Handling:

Do not breathe vapour/spray. Avoid contact with skin and eyes. Atmospheric concentrations should be minimised and kept as low as reasonably practicable below the occupational exposure limit. The efficiency of the ventilation system must be monitored regularly because of the possibility of blockage. When the product is sprayed or heated, suitable respiratory protection equipment with positive air supply is required. Keep equipment clean.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep away from moisture. If a container is contaminated, do not reseal it. Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.

Storage Life: See Product Data Sheet

Storage Temperature: See Product Data Sheet

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Control:

Use of the basic principles of Industrial Hygiene will enable this material to be used safely.

Control parameters:

8 hours time weighted average exposure limits/Short-term exposure limits/maximum exposure limits:--

biological standards:--

Personal protective equipment:

Respiratory protection: Adequate ventilation should be provided to maintain solvent concentrations in the workplace below exposure limits. Respiratory protection if there is a risk of exposure to high vapor concentrations.

Hand protection: Wear suitable impervious gloves.

Eye protection: Chemical goggles if there is a risk of splashing.

Skin and body protection:--

Hygienic measures:--

9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid, Transparent.

Odor threshold: Not available.

PH value: Not available.

Decomposition temperature:

Not available.

Auto-ignition temperature:

Not available.

Vapor pressure: Not available.

Density: Not available.

Partition coefficient(n-octane/water, log Kow):--

Odor: Slightly musty.

Melting point: Not available.

Boiling point/boiling point range:>300°C
decomposes

Flash point:

Test method: Open cup 210°C

Closed cup 245°C

Explosion limits: Not available.

Vapor density: Not available.

Solubility: insoluble in water.

Evaporation rate: Not available.

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10) STABILITY AND REACTIVITY

Stability: Stable at room temperature.

Possible hazardous reactions under specific conditions: Under normal conditions of storage and use, hazardous reactions will not occur.

Condition to avoid: Avoid high temperatures.

Materials to avoid: Water, alcohols, amines, bases, and acids.

Hazardous Decomposition Products: Combustion products may be irritant. Carbon oxides (CO,CO²) nitrogen oxides (NO,NO² esc.) hydrocarbons and HCN.

11) TOXICOLOGICAL INFORMATION

Routes of exposure:--

Symptoms:

Eye Irritation: Liquid and vapor can cause irritation on contact and at high concentrations.

Skin Irritation :Frequent skin contact may cause irritation.

Acute toxicity: Low order of acute toxicity.

Excessive exposure may produce anaesthetic or narcotic effects.

Chronic toxicity or long term toxicity:--

12) ECOLOGICAL INFORMATION

Ecotoxicity: The product may be harmful to aquatic organisms.

Persistence and degradability: The product is partially or slowly biodegradable.

Bioaccumulative potential:--

Mobility in soil:--

Other adverse effects:--

13) DISPOSAL CONSIDERATIONS

Methods of waste disposal:

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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14) TRANSPORT INFORMATION

United Nations number (UN No): Non- Regulated.

UN Proper shipping name: Non- Regulated.

Transport hazard class (es): Non- Regulated.

Packing group: Non- Regulated.

Marine pollutant (Yes/No): Non- Regulated.

Specific transport measures and precautionary conditions: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15) REGULATORY INFORMATION

Type of Regulated Paint under the Air Pollution Control (Volatile Organic Compounds)

Regulation of Hong Kong: Roof Coatings (Exposed)

The information given here is to the best of our knowledge true and accurate and is provided solely for making safety assessments. It is not a sales specification or an indication of suitability for a particular use. Further information may be obtained from Ronacrete (Far East) Ltd.

MATERIAL SAFETY DATA SHEET

1) IDENTIFICATION OF PRODUCT AND COMPANY

Product: Monoprufe SX 700 Part B
Intended use: Waterproofing Coatings
Supplier: Ronacrete (Far East) Limited
Telephone: +852 2865 5872
Facsimile: +852 2865 5568

2) COMPOSITION

	% by weight	CAS No
Polyoxypropylenediamine	77%	9046-10-0
Glyceryl poly(oxypropylene)triamine	20%	64852-22-8
Iron(II , III) oxide	2.5%	1317-61-9

3) HAZARDS IDENTIFICATION

Causes mild skin irritation.
Causes eye irritation.
Other hazards:
If prolonged skin contact may produce redness.
If not carefully ingested, the stomach will produce irritation

4) FIRST AID MEASURES

Inhalation: Remove from exposure. In case of possible respiratory irritation or if feeling unwell in cases of prolonged exposure, Obtain medical attention.

Skin Contact: Immediately wash skin thoroughly with soap and water. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.

Eye Contact: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open.

Ingestion: Do not induce vomiting. Wash out mouth with water. Obtain medical attention urgently.

5) FIRE FIGHTING MEASURES

Suitable fire extinguishing media: Carbon dioxide, dry chemical powder, foam, water fog.
Specific hazards may be encountered during fire-fighting:--
Specific fire-fighting methods:--
Specific equipment for the protection of fire-fighters:
Wear full protective clothing and self-contained breathing apparatus.

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6) ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear appropriate protective clothing.
Eliminate all sources of ignition.
Ventilate area to dispel any residual vapors.

Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

Methods for cleaning up:

If safety allows, stop or reduce the leakage.
Use stable and inflammable materials such as sands or soil to stop leakage.
Use water to wash the area, when the leakage is in a small amount.
Call the emergency center or suppliers to help, when the leakage is in a large amount.

7) HANDLING AND STORAGE

Handling:

Exposure by inhalation or skin contact should be minimized by good industrial hygiene practices.
Use in well ventilated area. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing.

Storage:

Storage area should be: cool, dry, well ventilated, out of direct sunlight. Store away from sources of heat or ignition.

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Control:

Use adequate ventilation to maintain concentrations below the material to allow the concentration of exposed.

Control parameters:

8 hours time weighted average exposure limits/Short-term exposure limits/maximum exposure limits:--

biological standards:--

Personal protective equipment:

Respiratory protection: Adequate ventilation should be provided to maintain solvent concentrations in the workplace below exposure limits. Respiratory protection if there is a risk of exposure to high vapor concentrations.

Hand protection: Wear suitable impervious gloves.

Eye protection: Chemical goggles if there is a risk of splashing.

Skin and body protection:--

Hygienic measures:--

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9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid, black.**Odor threshold:** amine-like.**PH value:** --**Decomposition temperature:**--**Auto-ignition temperature:** 330°C**Vapor pressure:** <1 mbar**Density:** 0.9978**Partition coefficient(n-octane/water, log****Kow):** >6**Odor:** Amine types.**Melting point:** -29°C**Boiling point/boiling point range:** >250°C**Flash point:** > 234 °C**Test method:** Open cup

Closed cup

Explosion limits:--**Vapor density:** <10 millibars (20 °C)**Solubility:** partially soluble**Evaporation rate:**--

10) STABILITY AND REACTIVITY

Stability: Please refer to the (7).

Possible hazardous reactions under specific conditions:--

Condition to avoid: High temperature.

Materials to avoid: Acids, oxidizing agents, isocyanate abnormality.

Hazardous Decomposition Products: --

11) TOXICOLOGICAL INFORMATION

Routes of exposure:--

Symptoms:

Eye Irritation: Liquid and vapor can cause irritation on contact and at high concentrations.

Skin Irritation :Frequent skin contact may cause irritation.

Acute toxicity: skin by a single test, the actual non-toxic. Uptake by a single test, the actual non-toxic.

Chronic toxicity or long term toxicity: Product not tested, the statement by the nature of the various components of research push.

12) ECOLOGICAL INFORMATION

Ecotoxicity: The product may be harmful to aquatic organisms.

Persistence and degradability: The product is partially or slowly biodegradable.

Bioaccumulative potential:--

Mobility in soil:--

Other adverse effects:--

13) DISPOSAL CONSIDERATIONS

Methods of waste disposal:

Product Disposal: Dispose of as Special Waste Arrange for disposal via a licensed waste contractor.

Container Disposal: Dispose of containers with care. Empty containers may contain hazardous residues. Empty packaging should be removed by a licensed waste contractor.

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14) TRANSPORT INFORMATION

United Nations number (UN No): Non- Regulated.
UN Proper shipping name: Non- Regulated.
Transport hazard class (es): Non- Regulated.
Packing group: Non- Regulated.
Marine pollutant (Yes/No): Non- Regulated.
Specific transport measures and precautionary conditions: Non- Regulated.

16) REGULATORY INFORMATION

Type of Regulated Paint under the Air Pollution Control (Volatile Organic Compounds)
Regulation of Hong Kong: Roof Coatings (Exposed)

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