Material Safety Datasheet

Revision Date: May 2024 Version: The second edition Effective date: June 1, 2024

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Chemical Name: Spray Polyurea Waterproof Coating - Component B

Company Name: Shunda Polyurethane Ltd.

Manufacturer Enterprise: Shunda Polyurethane Co. Ltd.

Address: 1200 Denison St

Zip code: L3R 8G6 **Fax:** 905-754-0558

Emergency call: 905-754-0568

Section 2 - HAZARDS IDENTIFICATION

Dangerous class: Identified as the general cargo transport

Explosion hazards: This product is not classified as a flammable liquid, explosive, oxidant, corrosive, toxic chemical, or radioactive material for storage and transportation purposes. Therefore, it is not considered a hazardous cargo.

Precautionary Statements:

Prevention:

Wear protective gloves, and in the event of inadequate ventilation, wear respiratory protection. Use only outdoors or in well-ventilated areas to avoid breathing in vapors. Wash thoroughly after handling the product. Contaminated work clothing should not leave the workplace.

Response:

IF ON SKIN: Remove contaminated clothing and wash it thoroughly before reusing. Wash any exposed skin with plenty of soap and water. If you experience skin irritation or a rash, seek medical advice or attention.

IF IN EYES: If the product comes into contact with your eyes, rinse cautiously with water for several minutes. If you are wearing contact lenses and it's easy to do so, remove them before rinsing. If eye irritation persists, seek medical advice or attention. Remember to wash your hands thoroughly after handling the product.

IF INHALED: If someone inhales the product and experiences difficulty breathing, move them to a place with fresh air and let them rest in a comfortable breathing position. If the person is still having trouble breathing or feeling unwell, call a POISON CENTER or doctor/physician for further advice. If you experience respiratory symptoms, seek medical attention immediately.

Storage:

Store the product in a locked area. It reacts slowly with water to produce carbon dioxide, which can cause closed containers to rupture. This reaction is more rapid at higher temperatures.

Disposal:

If empty containers retain residual material, avoid water ingress during storage to prevent rupture. Containers must not be used to store food or other items before proper decontamination to prevent harm to human health and the environment. The recycling, reuse, and disposal of packaging must comply with national and local laws and regulations. Any hazards or losses resulting from improper disposal of the packaging shall be borne by the party responsible for the disposal.

Physical and Chemical Hazards:

Combustible when exposed to high heat or open flame. Polymerization or decomposition may occur at temperatures above 204 °C (399 °F), potentially causing container rupture or explosion.

Health Hazards:

Inhalation of vapors may irritate the respiratory tract, leading to headache, runny nose, sore throat, asthma, chest tightness, breathing difficulty, and decreased lung function. High-level exposure can cause bronchitis, bronchospasm, and pulmonary edema. Eye contact may result in conjunctival irritation and moderate corneal opacity. Skin contact may cause irritation, allergic reactions, and dermatitis. Ingestion may cause abdominal cramps and vomiting. Prolonged exposure can lead to permanent loss of lung function, skin rashes, and allergic reactions.

Environmental Hazards:

May contaminate water bodies, soil, and the atmosphere.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Preparation: Mixture

Component Name	%	CAS NO.
Polypropylene Glycol	70	25332-69-4
Diethyl Toluene Diamine	15	68479-98-1
Calcium Carbonate	15	471-34-1

Section 4 - FIRST AID MEASURES

Eye

In case of contact with the eyes, immediately rinse with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention immediately.

Skin

After contact with skin, remove contaminated clothing immediately wash with plenty of soap water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes.

Inhaled

Quickly move the person to fresh air. Ensure the airway remains clear. If breathing is difficult, administer oxygen. If breathing or heartbeat stops, immediately perform cardiopulmonary resuscitation (CPR) and seek medical attention.

Swallowed

Give the person warm water to drink. Do not induce vomiting. If the patient is unconscious or experiencing convulsions, do not give anything by mouth. Seek immediate medical attention.

Section 5 - FIRE FIGHTING MEASURES

Specific Hazards:

Combustible when exposed to high heat or open flame. Polymerization or decomposition may occur at temperatures above 204 ° C (399 ° F), which can lead to container rupture or explosion. Hot material can react violently with water, releasing harmful gases.

Extinguishing Media:

Use foam, dry chemical, or carbon dioxide (CO_2) extinguishing agents.

Firefighting Instructions and Precautions:

Firefighters must wear self-contained breathing apparatus and full protective fire- and chemical-resistant clothing. Fight the fire from the upwind side whenever possible. Move containers from the fire area to an open space if it can be done safely. Continuously spray water to keep containers in the fire zone cool until the fire is completely extinguished. For large fires, use water to cool containers exposed to flames to prevent explosion.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:

Isolate the contaminated spill area and restrict access. Eliminate all sources of ignition. Emergency responders should wear a gas mask or respirator, rubber gloves, and chemical-resistant protective clothing. Do not handle ruptured containers or spilled material until appropriate protective gear is in place. Shut off the source of the leak if it can be done safely. Avoid contact with or walking through the spilled material.

Environmental Precautions:

Prevent the spilled material from entering waterways, sewers, or drainage systems.

Methods and Materials for Containment and Cleanup:

- **Small Liquid Spill:** Absorb with vermiculite, dry sand, or earth.
- **Solid Spill:** Carefully sweep up and gradually add in small portions to a large amount of water, allow to stand, then discharge the diluted liquid into a wastewater treatment system.
- **Large Spill:** Contain and recover the substance. For contaminated ground， flush with a solution containing 3~8% ammonia water and 2~7% detergent.

Section 7 - HANDLING AND STORAGE

Handling Precautions:

The operation should be conducted in a closed system with adequate local exhaust ventilation. Isolation of the operation is highly recommended. Operators must receive specialized training and strictly adhere to operating procedures. It is advised that operators wear self-inhalation filter-type dust masks, chemical safety goggles, gas-permeable anti-poison clothing, and chemical-resistant gloves. Keep away from ignition sources and heat. Smoking is

strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. Avoid generating dust. Avoid contact with oxidizing agents, acids, and alkalis. Handle with care during loading and unloading to prevent damage to packaging and containers. Equip the area with appropriate types and quantities of fire-fighting equipment and leak emergency response equipment. Empty containers may retain hazardous residues.

Storage Precautions:

Store in a cool, well-ventilated warehouse. Keep away from ignition sources and heat. Protect from light. The storage temperature should not exceed 35°C, and relative humidity should not exceed 80%. Keep packages sealed. Store separately from acids, alkalis, ammonia, alcohols, and amines. Incompatible materials must never be stored together. Equip the storage area with appropriate types and quantities of fire-fighting equipment. The storage area should contain suitable materials for containing spills.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Provide adequate ventilation to ensure that on-site exposure limits are not exceeded. Provide safety showers and eye-wash equipment.

Respiratory Protection:

In conditions where airborne concentration exceeds the limit, wear an air-supplying respirator or a self-contained breathing apparatus (SCBA).

Eye Protection:

Wear chemical safety goggles.

Body and Skin Protection:

Wear gas-permeable anti-poison clothing.

Hand Protection:

Wear chemical-resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Colorless to variously colored transparent liquid.

pH (specify concentration): Not applicable

Melting Point/Freezing Point (°C): Not available

Boiling Point, Initial Boiling Point, and Boiling Range (°C): >200

Density: Not available

Relative Vapor Density (Air = 1): Not available

Relative Density (Water = 1): 1.1 ± 0.1

Heat of Combustion (kJ/mol): Not available

Saturated Vapor Pressure (kPa): Not available

Critical Pressure (MPa): Not available

Critical Temperature (°C): Not available

Flash Point (°C): >230

n-Octanol/Water Partition Coefficient: Not available

Decomposition Temperature (°C): Not available

Auto-ignition Temperature (°C): ≥220

Lower Explosive Limit [% (V/V)]: Not available

Upper Explosive Limit [% (V/V)]: Not available

Odor Threshold: Not available

Evaporation Rate: Not available

Solubility: Readily soluble in organic solvents such as benzene, toluene, and chlorobenzene; slightly soluble in water with a slow reaction.

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

Stability: Stable under normal conditions.

Incompatible Materials: Water, bases, acids, alcohols, amines.

Conditions to Avoid: Light exposure.

Hazardous Reactions: Capable of undergoing polymerization.

Hazardous Decomposition Products: Nitrogen oxides, hydrogen cyanide, etc.

Section 11 - TOXICOLOGICAL INFORMATION

Skin irritation/corrosion:

Adverse symptoms may include the following: Irritation, Redness

Eye damage/irritation: Causes eye irritation.

Respiratory or Skin Sensitization: May cause sensitization via skin contact or inhalation.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: IARC Carcinogenicity Classification: Category 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity — Single Exposure: No data available.

Specific Target Organ Toxicity — Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Section 12 - ECOLOGICAL INFORMATIONS

Ecotoxicity: No data available.

Persistence and Degradability: No data available.

Bioaccumulation Potential: No data available.

Mobility in Soil: No data available.

Section 13 - DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14 - TRANSPORTATION INFORMATION

UN Number: Not applicable
UN Proper Shipping Name: Not applicable
UN Hazard Class: Not applicable
Packaging Group: II
Packaging Symbol: Not applicable
Packaging Method: Steel drums
Marine Pollutant: No

Transport Precautions: Prior to transport, ensure packaging is intact and sealed. During transport, prevent leakage, collapse, falling, and damage. Strictly avoid mixed transport with acids, oxidizing agents, food, and food additives. Protect from direct sunlight, rain, and high temperatures during transit. Must be labeled "Keep Away from Food." Transport is subject to quantity limitations for air and rail shipment.

Section 15 - REGULATORY INFORMATION

Law information: The following laws, regulations and standards have made some suitable rules for the chemical's safety use, storage, transportation, loading and unloading, classification and marking and other parts
Safety production law of the people's Republic of China (adopted at the tenth meeting of the Standing Committee of the Ninth National People's Congress in August31, 2014);
Law of the people's Republic of China on the prevention and treatment of occupational diseases (adopted at the twenty-fourth session of the Ninth National People's Congress of the people's Congress of China in December31, 2011);
Law of the people's Republic of China on environmental protection (adopted at the twelfth meeting of the Standing Committee of the Eighth National People's Congress on April 24, 2014);
Regulations on the safety management of hazardous chemicals (the five hundred ninety-one executive meeting of the

State Council);

The use of toxic substances in the workplace labor protection regulations (three hundred-two executive meeting of the State Council adopted);

Safety Production License Regulations (three hundred-seven executive meeting of the State Council).

Section 16 - OTHER INFORMATION

Disclaimer: The Chemical Registration Center of the State Administration of Work Safety has provided all relevant information in this MSDS comprehensively and accurately, but we cannot guarantee its absolute universality or precision. This MSDS is intended solely to provide safety precautionary information for this product to personnel with appropriate professional training who will be handling it. Individual users who obtain this MSDS must make an independent judgment regarding its suitability for their specific conditions of use. The Chemical Registration Center assumes no liability for any injuries resulting from the use of this MSDS in specific application scenarios.

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