SAFETY DATA SHEET

IMTECH RUBBER PRODUCTS

PermaFix - PART "B"

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Products Name: PermaFix PART "B"
Chemical Family: Polyurethane Curative

Chemical Name:Applications:
Diethyltoluenediamine [DETDA]
Used as a polyurethane curative.

Supplier's Name: IMTECH Rubber Products

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Preparation Date of SDS: October 27, 2015

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Section 2 – HAZARD(S) IDENTIFICATION

WHMIS Classification

D-1A, D-1B, D-2A, D-2B, E VERY TOXIC MATERIALS

Target Organs

Lungs

Other hazards which do not result in classification

Lachrymator.

GHS Classification

Acute toxicity (Category 4) (oral)
Acute toxicity, Dermal (Category 3)

Serious eye damage/eye irritation (Category 2A)

Specific target organ toxicity — repeated exposure (Category 2)

Hazardous to the aquatic environment - acute (Category 1)

Hazardous to the aquatic environment – chronic (Category 1)

Skin corrosion (Category 1B)

Skin sensitization (Category 1)

GHS Label elements, including precautionary statements

Pictogram











Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H373 May cause damage to organs (Pancreas) through prolonged or

repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects..

Precautionary statement(s)

P260 Do not breathe dust/gas/mist/vapors.

P264 Wash with plenty of water and soap thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or doctor/ physician.P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.

P361 Take off immediately all contaminated clothing.

P301 + P330 IF SWALLOWED: rinse mouth.

P391 Collect spillage.

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

HMIS Classification Health hazard: 3

Chronic Health Hazard: *

Flammability: 1 Physical hazards: 0

Potential Health Effects

Inhalation Toxic if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eves Causes eve irritation.

Ingestion May be harmful if swallowed.

Section 3- COMPOSITION / INFORMATION ON INGREDIENTS

	Cas No.	Percentage* (W/W)	Exposure Limits ACGIH OSHA PEL	
Diethyltoluenediamine (DETDA)	68479-98-01	15 - 30%	0.02 ppm	N.A.
N-Aminoethyl-piperazine	140-31-8	15 - 30%	N.A.	N.A.

^{*}Exact percentages are withheld as a trade secret however the health and environmental hazard effects stated in this SDS describe the effects of the highest concentration of each ingredient; in compliance with (ST/SG/AC.10/30/Rev.6) and (29 CFR 1910.1200).

Section 4 - FIRST AID MEASURES

Eye Contact: Flush eyes immediately with water for at least 20 minutes. Hold

eyelids open during flushing. Obtain medical attention immediately.

Skin Contact: Remove contaminated clothing. Wipe excess material from the skin.

Wash skin with soap and water. Obtain medical attention if irritation

persists.

Inhalation: Move victim to fresh air. Give artificial respiration ONLY if breathing

has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention immediately.

Ingestion: If victim is alert and fully conscious, give 2 glasses of water and

induce vomiting. Never give anything by mouth if victim is unconscious or convulsing. Obtain medical attention immediately.

Note to Physicians: Medical conditions that may be aggravated by exposure to this

product include diseases of the skin, eyes or respiratory tract.

Routes of Entry: Eyes, skin, ingestion, inhalation.

Section 5 – FIRE FIGHTING MEASURES

Flash Point: > 150 °C
Flash Point Method: Closed Cup.
Auto Ignition Temp: Not available.
Flammable Limits in air (%): Not available.

Extinguishing Media: Use water spray, foam, dry chemicals or carbon dioxide (CO2).

Hazardous Decomposition/ Combustion Materials: Thermal decomposition products are toxic and may include

oxides of carbon, nitrogen and hydrogen cyanide.

Special Protective Equipment:

Wear protective clothing and self-contained breathing apparatus.

Unusual Fire/Explosion Hazard:

None.

NFPA RATINGS: HEALTH 3; FLAMMABILITY 1; INSTABILITY: 0
HMIS RATINGS: HEALTH 3; FLAMMABILITY 1; INSTABILITY: 0

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment. Wear appropriate

respiratory protection.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed.

Prevent contamination of soil. Consult Local authorities.

Procedure for Clean-Up: Isolate hazard area and restrict access. Stop the leak if it can be

done without risk. Prevent contamination of waterways. Absorb with an inert dry material and place in an appropriate waste disposal container. Large spills, dike and pump into suitable containers. Clean up all residual with absorbent material. Place in appropriate container. Notify applicable government authority if release is reportable or could adversely affect the environment. Ventilate the

area thoroughly.

Section 7 – HANDLING AND STORAGE

Handling: For industrial use only. Use only with adequate ventilation. Handle

and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personal protective equipment. Use normal "good" industrial hygiene and

housekeeping practices.

Storage: Store in a cool, dry, well ventilated area. Keep containers tightly

closed. Do not store in open containers. Store under nitrogen.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation is required to maintain exposure to within

applicable limits. Make up air should be supplied to balance air that

is removed by local or general exhaust ventilation.

Respiratory Protection: If exposure exceeds occupational exposure limits, use an

appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied

air respirator.

Gloves: Impervious chemical resistant gloves.

Skin Protection: Skin contact should be prevented through the use of suitable

protective clothing, gloves and footwear, selected for conditions of

use and exposure potential.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protective Data: Ensure that eyewash stations and safety showers are proximal to the

work station location.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Viscous liquid.

Color: Light to very dark amber liquid – may be tinted.

Specific Gravity: $1.0 - 1.15 \text{ g/cc} \otimes 20^{\circ}\text{C}$

Boiling Point: >300°C

Melting/Freezing Point: <-10°C

Vapor Pressure: Negligible.

Vapor Density (air = 1) Not available

Volatile Organic Compounds: No data available

Odor: Faint, amine odour.

Odor Threshold: Not available

Evaporation Rate: Low

Section 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur. **Conditions to Avoid:** Moisture and heat.

Materials to Avoid: Hazardous combustion

Strong acids, bases, strong oxidizing agents, water.

Products:

Oxides of carbon, nitrogen and sulphur.

Section 11 – TOXICOLOGICAL INFORMATION

Toxicological Data: Diethyltoluenediamine (DETDA)

Oral LD50: > 500 mg/kg (Rat)

Dermal LD50: > 2,000 mg/kg (Rabbit)

Inhalation LC50: > 2.45 mg/L (Rat)

Skin Contact: Non-Irritating (Rabbit)

Eye Contact: Non-Irritating (Rabbit)

Sensitization: Positive (guinea pig)

Carcinogenicity: This product may have carcinogenic effects.

Mutagenicity: There is no substantial evidence of mutagenic potential.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ecotoxicity – Fish Species Acute Invertebrates Ecotoxicity

Data Toxicity: Freshwater Algae

Diethyltoluenediamine

LC50 (Rainbow Trout)

LC50 (Water flea)

Not Available

LIQUID.

(DETDA)

Biodegradability:

16.9 mg/L

0.9 mg/L

ENVIRONMENTALLY HAZARDOUS SUBSTANCE.

This product is not biodegradable.

Section 13 – DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with local,

state/provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an

approved waste management facility.

Section 14 – TRANSPORT INFORMATION

TDG (Ground Transport): This product is Not Regulated.

IATA (Air Shipments):

N.O.S.

IMDG (Marine Shipments):

Technical Description: Diethyltoluenediamine

Class:

UN ID: UN 3082

Packing Group:

Special Note/Marking: MARINE POLLUTANT

Section 15 – REGULATORY INFORMATION

U.S. TSCA Inventory Status: All compounds of this product are either on the Toxic Substances

Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All compounds of this product are either on the Domestic

Substances List (DSL); the Non- Domestic Substances List (NDSL)

or exempt.

Note: Not available.

<u>US Regulatory Rules</u> CECLA/SARA SARA (311, 312) CERCLA/SARA

Section 302: Hazard Class: Section 313:

U-REPAIR-60SL Part "B": Not Listed Listed Listed

California Proposition 65: Listed.
MA Right to Know List: Listed.
New Jersey Right-to-know List: Listed.
Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class: D-1A, D-1B, D-2A, D-2B, E VERY TOXIC MATERIALS

NFPA RATINGS: HEALTH 3; FLAMMABILITY 1; INSTABILITY: 0
HMIS RATINGS: HEALTH 3; FLAMMABILITY 1; INSTABILITY: 0

Section 16 – OTHER INFORMATION

All employees or contractors etc. who use this product must have access to this Safety Data Sheet.

This information is furnished without warranty, representation, inducement or licence of any kind, except that it is accurate to the best of IMTECH Rubber Products knowledge or is obtained from sources believed by IMTECH Rubber Products to be accurate. IMTECH Rubber Products makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use or reliance on same. Customers are encouraged to conduct their own tests.

DATE OF ISSUE: Oct. 27, 2015

HISTORY REVISION: SDS updated to comply with GHS regulations.

Replaces MSDS dated Dec 01, 2014.

PREPARED BY: IMTECH Rubber Products

END OF SDS