

SAFETY DATA SHEET

Preparation Date : May 2015

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name AMN 2060B

Other means of identification

Chemical Family Aromatic diamine blend
Formula $(C_2H_5)_2(CH_3)C_6H(NH_2)_2$

Recommended use of the chemical and restrictions on use

General function Curing chemical.
Uses advised against No information available

Company manufacture Forsch Polymer Corp.
3025 S. Wyandot st.
Englewood, Co 80110

For Non-Emergency 303-322-9611

Email forschpolymerco@aol.com

Emergency telephone number

Emergency Telephone Numbers 303-548-7716

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|------------|
| Acute Toxicity - Oral | Category 4 |
| Acute Toxicity - Dermal | Category 4 |
| Serious eye damage/eye irritation | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

Label elements

Emergency Overview

Warning

Hazard Statements

Harmful if swallowed

Harmful in contact with skin

Causes serious eye irritation

May cause damage to organs through prolonged or repeated exposure

Very toxic to aquatic life with long lasting effects



Appearance Liquid

Color Clear. Yellow.

Odor Pungent

Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Avoid release to the environment

Response

Get medical advice/attention if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF INHALED: Move to fresh air.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth
Collect spillage

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity 2.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation 3.1. Substances.

| Component | CAS-No | Weight % |
|-----------------------|------------|----------|
| Diethyltoluenediamine | 68479-98-1 | 30 – 95% |
| Di-n-Butyl Phthalate | 84-74-2 | 5 – 50% |

Note: The exact concentrations of the above listed chemicals are being withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

| | |
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| Eye contact | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| Skin Contact | Remove contaminated clothing and shoes. After contact with skin, wash immediately with plenty of water. Wash clothing before reuse. Seek medical advice. |
| Inhalation | Move to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, apply artificial respiration. Seek medical advice. |

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| Ingestion | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice. |
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Most important symptoms and effects, both acute and delayed

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| Symptoms | Harmful in contact with skin. Harmful if swallowed. Causes eye irritation. |
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Indication of any immediate medical attention and special treatment needed

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| Notes to Physician | Treat symptomatically. |
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5. FIRE-FIGHTING MEASURES

Extinguishing media

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| Suitable extinguishing media | Carbon dioxide, dry chemicals, foam, water spray (mist). |
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| Unsuitable Extinguishing Media | No information available. |
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Specific Hazards Arising from the Chemical

Combustion/explosion hazards In case of fire and/or explosion do not breathe fumes.

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| Hazardous Combustion Products | Oxides of carbon and nitrogen. |
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Explosion Data

| | |
|----------------------------------|-------|
| Sensitivity to mechanical impact | None. |
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|---------------------------------|-------|
| Sensitivity to static discharge | None. |
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Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and protective suit. Do not breathe smoke or vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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| Personal precautions | Wear suitable gloves and eye/face protection. |
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Environmental Precautions

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| Environmental precautions | Contain any spill with dikes or absorbents to prevent migration and entry into sewers or streams. May require excavation of contaminated soil. |
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Methods and material for containment and cleaning up

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| Methods for Containment | Prevent further leakage or spillage if safe to do so. |
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| Methods for Cleaning up | Take up small spills with dry chemical absorbent. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. |
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7. HANDLING AND STORAGE

Precautions for safe handling

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| Handling | Do not breathe vapours or spray mist. Mechanical ventilation is recommended. Local exhaust is needed at source of vapours. |
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Conditions for safe storage, including any incompatibilities

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| Storage | Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain quality:. Keep away from heat. Keep away from direct sunlight. |
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| Incompatible Materials | Strong acids. Strong oxidizing agents. |
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines A*

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Engineering Controls

controls

Ensure adequate ventilation, especially in confined areas. See Extended Safety Data Sheet.

Individual protection measures, such as personal protective equipment

Eye/face Protection Chemical goggles or face shield with safety glasses.

Skin Protection DERMAL PROTECTION: Dermal exposure is considered the primary route of exposure. BODY: A protective apron or suit such as polyethylene tyvek or equivalent should be used to minimize exposure from splashes.

Respiratory protection Approved organic vapor respirator when exposed to vapors from heated material. Approved supplied-air respirator, in case of emergency.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

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| 9. PHYSICAL AND CHEMICAL PROPERTIES |
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Information on basic physical and chemical properties

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| Appearance | Liquid |
| Color | Clear. Yellow.Amber-Dark |
| Odor | Pungent. |
| Odor Threshold | No information available |
| Molecular Weight | No information available |
| pH | Not available |
| Melting point/freezing point | No information available |
| Boiling Point/Range | 308.3 °C / 587 °F (1013 hPa) |
| Flash Point | 169 °C / 336 (PMCC) |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor Pressure | information available |
| Vapor Density | 0.000971 Pa (25°C) 6.2 |
| Relative density | 1.02 (20°C) |
| Solubility(ies) | |
| Water Solubility | 1% (20°C) |
| Solubility in other solvents | No information available |
| Partition coefficient | 1.16 (25 °C) |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity, kinematic Dynamic viscosity | No information available 286 mPa.s (20°C) |
| Explosive Properties | N o n e |
| Oxidizing Properties | N o n e |

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| 10. STABILITY AND REACTIVITY |
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| Reactivity Hazard | No data available |
| Stability | Stable under normal conditions. |
| Hazardous Reactions | No hazardous reaction expected under normal handling. |
| Hazardous Polymerization | None under normal processing. |

Conditions to Avoid Exposure to air.
 Materials to avoid Strong acids. Strong oxidizing agents.
 Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Not an expected route of exposure.
 Eye contact Irritating to eyes.
 Skin Contact Harmful if absorbed through skin.
 Ingestion Harmful if swallowed.

Potential Health Effects

Acute Effects

Skin corrosion/irritation Skin irritation: Slightly irritating but not sufficient for classification.
 Serious eye damage/eye irritation Eye irritation: Irritating to eyes. (rabbit).
 irritation Respiratory irritation : No data available
 Sensitization Not sensitizing. (guinea pig).

Chronic Effects

Mutagenic Effects In vitro mutagenicity test: Positive and negative results in bacterial and mammalian cells in the presence of metabolic activation. In vivo mutagenicity tests: Mouse micronucleus test • negative. Dominant lethal test, rat, negative.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | ACGIH Carcinogens | IARC | NTP | OSHA Carcinogens |
|-----------------------|------------|----------------------|------|-----|---------------------|
| Diethyltoluenediamine | 68479-98-1 | NL | NL | NL | NL |

| | | | | | |
|----------------------|-------------|----|----|----|----|
| Di-n-Butyl Phthalate | 84 – 74- 21 | NL | NL | NL | NL |
|----------------------|-------------|----|----|----|----|

Reproductive Effects No effect on reproductive organs in repeated dose studies in rats.
 STOT - single exposure No information available.
 STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
 Chronic Effects A two year feeding study in rats showed DETDA cause effects in the pancreas, liver, thyroid and eyes. An increase in the number of tumors in the liver and thyroid of male rats and in the liver and possibly mammary gland of female rats was found.
 Target Organ Effects Pancreas.
 Aspiration hazard No information available.

Numerical measures of toxicity

Product Information

Unknown Acute Toxicity No information available
 The following values are calculated based on chapter 3.1 of the GHS document .
 ATEmix (oral) 757 mg/kg
 ATEmix (dermal) 1128 mg/kg
 LD50 Oral: Rat Oral LD50: 738 mg/kg
 LD50 Dermal: Rabbit Dermal LD50: > 2000 mg/kg

Component Information

No information available

| Component | Rat Oral LD50 : | Rabbit Dermal LD50 : | Rat Inhalation LC50: |
|-----------------------------------|-----------------|----------------------|----------------------|
| Diethyltoluenediamine | 738 mg/kg | >2000 mg/kg | NA |
| Di - n- Butyl Phalate 84 - 74 - 2 | 8000 kg | NA | >15.68 mg/<4 hrs. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

| Component | Freshwater Algae EC50/72h : | Freshwater Fish LC50/96h | Water Flea EC50/48h : |
|-----------------------------------|--|--|--|
| Diethyltoluenediamine | 104 mg/l - Algae EC10/72h : 54 mg/l | > 104 mg/l - Fish LC50/48h : 200 mg/l | 5.8 mg/l - Water Flea LC50/48h : 0.5 mg/l |
| Di - n- Butyl Phalate 84 - 74 - 2 | NA | 1.54 mg/ < 96 hrs. | 2.99 mg/ < 48 hrs. |

Persistence/Degradability Not readily biodegradable. Photodegradation: T1/2. Air: 1.484. hour. (calculated).

Bioaccumulation/ Accumulation No information available.

Mobility in Environmental Media The substance is expected to partition primarily to soil and water. Koc =. 32-551 l/kg (QSAR estimate). Henry's law constant =. 0.000266. (20⁰0). (QSAR estimate).

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose in a safe manner in accordance with local/national regulations. Absorb and incinerate.

Contaminated Packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT



| | |
|----------------------|-----------------------|
| Proper Shipping Name | Diethyltoluenediamine |
| Hazard Class | 9 |
| UN No. | UN 3082 |
| Packing Group | III |

IMDG/IMO

| | |
|---------------------------|---|
| IMO Class | 9 |
| Packing Group | III |
| UN-No | 3082 |
| IMO Labelling and Marking | 9 + Marine Pollutant Marking |
| Proper Shipping Name | Environmentally hazardous substance liquid,N.O.S. (Diethyltoluenediamine) |
| EmS | F-A , S-F |
| Marpol -Annex II | Not determined |
| Marpol - Annex III | Marine Pollutant |
| Transport Description | UN 3082 Environmentally hazardous substance liquid,N.O.S. (Diethyltoluenediamine), 9, III, Marine pollutant |

IATA/ICAO

| | |
|-----------------------------|---|
| IATA/ICAO Class | 9 |
| Packing Group | III |
| UN-No | 3082 |
| IATA/ICAO Labelling/Marking | 9 + 'Environmentally hazardous substance' mark |
| Passenger Aircraft | Maximum net quantity per package: 450 L |
| Cargo aircraft only | Maximum net quantity per package: 450 L |
| Proper shipping name | Environmentally hazardous substance liquid,N.O.S. (Diethyltoluenediamine) |
| Transport Description | UN 3082 Environmentally hazardous substance liquid,N.O.S. (Diethyltoluenediamine), 9, III |

15. REGULATORY INFORMATION

| International Inventories | TSCA | DSL | NDSL | AICS | EINECS | ELINCS | ENCS | KECL | PICCS | IECSC | NZIoC |
|---------------------------|------|-----|------|------|--------|--------|------|------|-------|-------|-------|
| AMN 2060B | X | X | - | X | X | - | X | X | X | X | X |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous Categorization

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Reportable and Threshold Planning Quantities

The following components have RQs and/or TPQs under SARA and/or CERCLA

State Right-to-Know

This product contains the following chemicals regulated in the states listed below.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazards

D2A Very toxic materials

D2B Toxic materials

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| 16. OTHER INFORMATION | | | | |
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|------|----------|----------------|--------------------|--------------------|
| NFPA | Health 2 | Flammability 1 | Instability 0 | Physical Hazards - |
| HMIS | Health 2 | Flammability 1 | Physical Hazards 0 | |

Preparation Date : May 2015
Revision Date: May 2015

Disclaimer:

The information contained herein is accurate to the best of our knowledge. The Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances_

End of Safety Data Sheet