

# SAFETY DATA SHEET

Preparation Date : May 2015

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

### Product Identifier

Product Name AMN 10060B

### 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

|              |  |
|--------------|--|
| 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.

Most important symptoms and effects, both acute and delayed

Symptoms Harmful in contact with skin. Harmful if swallowed. Causes eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

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## 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Carbon dioxide, dry chemicals, foam, water spray (mist).

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

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

Hazardous Combustion Products Oxides of carbon and nitrogen.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Protective Equipment and Precautions for Firefighters

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

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable gloves and eye/face protection.

Environmental Precautions

Environmental precautions Contain any spill with dikes or absorbents to prevent migration and entry into sewers or streams. May require excavation of contaminated soil.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

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.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Handling Do not breathe vapours or spray mist. Mechanical ventilation is recommended. Local exhaust is needed at source of vapours.

Conditions for safe storage, including any incompatibilities

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.

Incompatible Materials Strong acids. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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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 polyethene 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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| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b> |
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Information on basic physical and chemical properties

|  |  |
|--|--|
| 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<br>286 mPa.s (20°C) |
| Explosive Properties                   | N o n e                                      |
| Oxidizing Properties                   | N o n e                                      |

|                                     |
|-------------------------------------|
| <b>10. STABILITY AND REACTIVITY</b> |
|-------------------------------------|

|                          |   |
|--------------------------|---|
| 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 :<br>54 mg/l | > 104 mg/l - Fish LC50/48h :<br>200 mg/l | 5.8 mg/l - Water Flea<br>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. (20<sup>0</sup>0). (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.                        UN3082  
 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 | ROHS | PICCS | IECSC | NZIoC |
|---------------------------|------|-----|------|------|--------|--------|------|------|-------|-------|-------|
| AMN 10060B                | 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