

# SAFETY DATA SHEET

Preparation Date : June, 2018

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

### Product Identifier

Product Name AMN 680B

### 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

Signal Word: 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%
2,2,4 Trimethyl – 1,3 Pentanediol Diisobutyrate	6846-50-0	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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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.

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

<b>10. STABILITY AND REACTIVITY</b>
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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
2,2,4 Trimethyl – 1,3 Pentanediol Diisobutyrate	6846-50-0	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
2,2,4 Trimethyl – 1,3 Pentanediol Diisobutyrate 6846-50-0	N/A	NA	N/A

## 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
2,2,4 Trimethyl – 1,3 Pentanediol Diisobutyrate 6846-50-0	NA	6mg/L	1.46mg/L

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>). (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 680B	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.

California Prop 65: To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

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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