SAFETY DATA SHEET

Preparation Date : June, 2018

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

Product Identifier

Product Name	AMN 1040B

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.

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.

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.

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

Exposure Guidelines A• •ro•riate en• ineerin controls

Engineering 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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	No information available
point 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
Lower flammability limit:	available No
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	No information available
solvents Partition coefficient	1.16 (25 °C)
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic Dynamic	No information available
viscosity	286 mPa.s (20°C)
Explosive Properties	N o n e
Oxidizing Properties	N o n e

10. STABILITY AND REACTIVITY

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 — 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.

Carcino enici — The table below indicates whether each aaencv 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 — No information available

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

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 ^{0}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

IATAIICAO

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 1040B	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.

16. OTHER INFORMATION

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