

### NIAX\* CATALYST A-1 Tertiary Amine / Glycol Mixture

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer Name:** Momentive Performance Materials - Sistersville  
3500 South State Route 2  
FRIENDLY WV 26146

**Revised:** 02/07/2013  
**Prepared by** Product Safety Team  
**CHEMTREC** 1-800-424-9300  
**MSDS Contact** 1-888-443-9466  
**Information** 4information@momentive.com

**Chemical Family/Use:** Catalyst

**Formula:** Tertiary Amine / Glycol Mixture

#### HMIS

Health: 3 Flammability: 2 Reactivity: 0

#### NFPA

Health: 3 Flammability: 2 Reactivity: 0

#### 2. HAZARDS IDENTIFICATION

##### WHMIS CLASSIFICATION



Corrosive Material  
Combustible liquid.  
Toxic Material Causing Immediate and Serious Toxic Effects

##### EMERGENCY OVERVIEW

DANGER! Harmful and corrosive if swallowed. Causes skin and eye burns. Combustible. Aspiration may cause lung damage. Vapor may produce increased corneal thickness and eye irritation.

Form: Liquid Color: Colorless / Yellow Odor: amine like

##### Potential Health Effects

##### INGESTION

Causes severe irritation or chemical burns. Do NOT induce vomiting. Prolonged and/or repeated contact may result in: - lung damage - liver damage

##### SKIN

Corrosive. Prolonged and/or repeated contact may result in: - kidney damage

**NIAX\* CATALYST A-1  
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Causes: - nasal discomfort and discharge - chest pain Coughing. At low humidity (< 50%), respiratory and eye irritation are expected to be more severe. Prolonged and/or repeated exposure may cause the following effects: - thickening of the cornea - microscopic swelling of a variety of tissues

**EYES**

Causes severe irritation or chemical burns. See 'Notes to Physician'.

**MEDICAL CONDITIONS AGGRAVATED**

Skin contact may cause:

**CHRONIC EFFECTS / CARCINOGENICITY**

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS COMPONENT(S)**

PRODUCT COMPOSITION	CAS-NO.	WGT. %
Bis(2-dimethylaminoethyl)ether	3033-62-3	60% - 100 %
Dipropylene Glycol	25265-71-8	15% - 40 %

**4. FIRST AID MEASURES****INGESTION**

Give one or two glasses of water if patient is alert and able to swallow. Seek immediate medical attention. If medical attention will be delayed, contact a Regional Poison Centre or emergency medical professional regarding the use of activated charcoal/syrup of ipecac. Do not induce vomiting.

**SKIN**

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Wash contaminated clothing before reuse.

**INHALATION**

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.

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Get medical attention immediately.

**EYES**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

**NOTE TO PHYSICIAN**

This product is a corrosive material. Gastric lavage or emesis may be contraindicated. Ingestion or inhalation may result in shock, decreased blood pressure, pulmonary edema, CNS depression, edema of the glottis with asphyxia, and perforation of the esophagus or stomach. Inhalation of vapors or fumes may result in coughing, choking, and CNS effects followed after a 6-8 hour latent period by pulmonary edema with tightness in the chest, air hunger, dizziness, frothy sputum, and cyanosis. Physical findings may include moist rales, low blood pressure, and high pulse pressure. Hemoptysis and dyspnea may continue for several weeks. Prednisolone may reduce esophageal stricture formation.

Exposure to the vapor may cause minor transient edema of the corneal epithelium. This condition, referred to as "glauropsia", "blue haze" or "blue- gray haze", produces a blurring of vision against a general bluish haze and the appearance of halos around bright objects. The effect disappears spontaneously within a few hours of the end of an exposure and leaves no sequelae. Although not detrimental to the eye per se, glauropsia predisposes an affected individual to physical accidents and reduces the ability to undertake skilled tasks, such as driving a motorized vehicle.

**5. FIRE-FIGHTING MEASURES**

<b>FLASH POINT:</b>	74 °C; 165 °F
<b>METHOD</b>	ASTM D 93
<b>Autoignition Temperature:</b>	No data available.
<b>FLAMMABLE LIMITS LEL:</b>	1 %(V). (BDMAEE)
<b>FLAMMABLE LIMITS UEL:</b>	5.1 %(V). (BDMAEE)

**SENSITIVITY TO MECHANICAL IMPACT:** No

**SENSITIVITY TO STATIC DISCHARGE**

Sensitivity to static discharge is expected; material has a flash point below 200 F.

**EXTINGUISHING MEDIA**

All standard extinguishing agents are suitable.

**SPECIAL FIRE FIGHTING PROCEDURES**

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

**PRECAUTIONS FOR FIRE-FIGHTING**

This material may produce a floating fire hazard.

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**6. ACCIDENTAL RELEASE MEASURES****ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

**ENVIRONMENTAL PRECAUTIONS**

Do not allow runoff to sewer, waterway or ground.

**7. HANDLING AND STORAGE****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Do not taste or swallow. Avoid contact with skin and eyes. Keep out of reach of children.

**STORAGE**

Keep container tightly closed. Keep away from heat and flame.

**FURTHER INFORMATION ON STORAGE CONDITIONS**

No data available.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING CONTROLS**

Provide eyewash station and safety shower.; General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.; Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

**RESPIRATORY PROTECTION**

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

**PROTECTIVE GLOVES**

Chemical resistant gloves

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**EYE AND FACE PROTECTION**

Safety glasses with side shields; Wear approved safety goggles.; Face shield

**OTHER PROTECTIVE EQUIPMENT**

Wear suitable protective clothing and eye/face protection.

**Exposure Guidelines**

Component	CAS-No.	Source	Value
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Consult local authorities for acceptable provincial values.

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>BOILING POINT (°C):</b>	190 °C; 374 °F
<b>VAPOR PRESSURE (20 C) (MM HG):</b>	51.80
<b>VAPOR DENSITY (AIR=1):</b>	> 1
<b>FREEZING POINT:</b>	-80 °C; -112 °F
<b>MELTING POINT:</b>	-80 °C; -112 °F
<b>PHYSICAL STATE:</b>	Liquid
<b>ODOR:</b>	amine like
<b>ODOR THRESHOLD:</b>	No data available.
<b>COLOR:</b>	Colorless / Yellow
<b>EVAPORATION RATE (BUTYL ACETATE=1):</b>	0.08
<b>SPECIFIC GRAVITY:</b>	ca. 0.9
<b>DENSITY:</b>	0.9020 g/cm <sup>3</sup>
<b>pH:</b>	No data available.
<b>SOLUBILITY IN WATER (20 C):</b>	Soluble
<b>Partition Coefficient: n-octanol/water:</b>	Not determined.

**10. STABILITY AND REACTIVITY**

**Stability**

Stable

**HAZARDOUS POLYMERIZATION.**

Hazardous polymerisation does not occur.

**NIAX\* CATALYST A-1  
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In case of fire, gives off (emits); Carbon oxides; Nitrogen Oxides; Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.; Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

**INCOMPATIBLE MATERIALS**

Avoid contact with: Strong oxides. Acids. Halogens.

**CONDITIONS TO AVOID**

None known.

**11. TOXICOLOGICAL INFORMATION****GENERAL**

The following information is applicable to a component of this material.

**ACUTE ORAL**

BDMAEE; LD50; Species: Rat; 677 mg/kg;

**Repeated dose toxicity**

No data available.

**ACUTE DERMAL**

BDMAEE; LD50; Species: Rabbit; 235 mg/kg;

**ACUTE INHALATION**

BDMAEE; LC50; Species: Rat; 143 ppm; Remarks: Toxicity following inhalation exposure of vapor is directly related to the relative humidity of the atmosphere. At typical ambient humidity (i.e., >=50%), mild irritation to the respiratory tract and eyes is anticipated. At low humidity (<50%), more severe irritation and systemic toxicity is expected.

,At low humidity (< 50%), respiratory and eye irritation are expected to be more severe.

**OTHER**

Contains one or more amines which may react with nitrites or other nitrosating agents to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals.

**GENETIC TOXICITY IN VITRO**

No data available.

**GENETIC TOXICITY IN VIVO**

No data available.

**SENSITIZATION**

BDMAEE; Species: Guinea Pig; Result: Did not cause sensitization on laboratory animals.

**NIAX\* CATALYST A-1  
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BDMAEE; Species: Rabbit; Result: Corrosive

**EYE IRRITATION**

BDMAEE; Species: Rabbit ; Result: Corrosive

**MUTAGENICITY**

No data available.

**12. ECOLOGICAL INFORMATION****ECOTOXICOLOGY**

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this Safety Data Sheet.

**Elimination information (persistence and degradability)****Biodegradation**

Result: The product is not readily biodegradable.

Method: OECD-Guideline 301 F (Manometric Respirometry Test)

Literature Reference

**13. DISPOSAL CONSIDERATIONS****DISPOSAL METHODS**

Disposal should be made in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION****Canadian TDG Shipping Name:** Amines, liquid, corrosive, n.o.s.(Bis(2-dimethylaminoethyl)ether)**TDG HAZARD CLASS:** 8**TDG LABEL (S):** 8**UN/NA NUMBER:** UN2735**PACKING GROUP:** II**IMDG SHIPPING NAME:** Amines, liquid, corrosive, n.o.s.(Bis(2-dimethylaminoethyl)ether)**Class:** 8**IMDG-Labels:** 8

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<b>UN NUMBER:</b>	UN2735
<b>PACKING GROUP:</b>	II
<b>EMS NO.:</b>	F-A; S-B
<b>IATA:</b>	Amines, liquid, corrosive, n.o.s. (Bis(2-dimethylaminoethyl)ether)
<b>Class:</b>	8
<b>ICAO-Labels:</b>	8
<b>UN NUMBER:</b>	UN2735
<b>PACKING GROUP:</b>	II

**15. REGULATORY INFORMATION****Inventories**

Australia Inventory of Chemical Substances (AICS)	y (positive listing)
EU list of existing chemical substances	y (positive listing)
Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)
China Inventory of Existing Chemical Substances	y (positive listing)
Korea Existing Chemicals Inventory (KECI)	y (positive listing)
Canada DSL Inventory	y (positive listing)
Canada NDSL Inventory	n (Negative listing)
New Zealand Inventory of Chemicals	y (positive listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)
TSCA list	y (positive listing)

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

**Canadian Regulatory Information****WHMIS CLASSIFICATION**

Corrosive Material, Combustible liquid., Toxic Material Causing Immediate and Serious Toxic Effects

**CPR Compliance**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.



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**US Regulatory Information****SARA (311,312) HAZARD CLASS**

Acute Health Hazard; Fire Hazard

**CALIFORNIA PROPOSITION 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION****OTHER**

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

,C = ceiling limit      NEGL = negligible  
EST = estimated      NF = none found  
NA = not applicable      UNKN = unknown  
NE = none established      REC = recommended  
ND = none determined      V = recommended by vendor  
SKN = skin      TS = trade secret  
R = recommended      MST = mist  
NT = not tested      STEL = short term exposure limit  
ppm = parts per million      ppb = parts per billion

By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).