

NIAX\* CATALYST A-1

# SAFETY DATA SHEET

## 1 PRODUCT AND COMPANY IDENTIFICATION

**Product name:** NIAX\* CATALYST A-1

**Recommended use:** Used in the manufacturing of polyurethane foam.

**Limitations on use:** For industrial use only.

**Manufacturer/Importer/Distributor Information** : Momentive Performance Materials (Thailand) Limited  
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Thailand

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**Emergency telephone number** : +65-3158-1074

**Responsible Department** : Product Stewardship & Compliance

## 2 HAZARDS IDENTIFICATION

### GHS classification:

#### Health Hazards:

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 3
Acute toxicity (Inhalation)	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1

### GHS label elements:

#### Symbol(s):



**Signal Word:** Danger

**Hazard Statement(s):** Toxic in contact with skin.  
Harmful if swallowed or if inhaled.  
Causes severe skin burns and eye damage.

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**Precautionary Statement**

**Prevention:**

Wear protective gloves. Wear eye protection/face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing vapors. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor 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.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in classification:**

**Primary hazards:** No data available.

**Specific hazards:** No data available.

**3 COMPOSITION / INFORMATION ON INGREDIENTS**

**Chemical nature:** Tertiary Amine / Glycol Mixture

**Substance or Preparation:**

**Mixtures**

**Hazardous ingredients:**

Chemical Identity	CAS number	Concentration*
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	>60%
Tertiary Amine	Trade secret	<10%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Trade secret information:** \*\* A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

**4 FIRST AID MEASURES**

**Inhalation:** Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention immediately.

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

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**Skin Contact:** 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. Get medical attention immediately.

**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.

No data available.

**5 FIRE-FIGHTING MEASURES**

**Extinguishing media:** Alcohol-resistant foam Carbon dioxide Dry chemical.

**Unsuitable extinguishing media:** Water

**Specific hazard arising from the chemical:** This material may produce a floating fire hazard.

**Special fire fighting procedures:** Do not use water jet as an extinguisher, as this will spread the fire.

**Special protective action for fire fighters:** Wear self-contained breathing apparatus and protective clothing.

**6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Avoid contact with eyes, skin, and clothing. Avoid contact with liquid and vapors. Use personal protective equipment.

**Environmental Precautions:** Do not allow runoff to sewer, waterway or ground.

**Methods and material for containment and cleaning up:** Absorb spillage with suitable absorbent material. Shovel up and place in a container for salvage or disposal.

**Notification Procedures:** Caution: Contaminated surfaces may be slippery. Remove sources of ignition.

**7 HANDLING AND STORAGE**

**Precautions for safe handling:** Sensitivity to static discharge is expected; material has a flash point below 200 F.

**Condition for safe storage, including any incompatibilities:** Keep container tightly closed. Keep away from heat and flame. Keep away from acids.

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Appropriated engineering control measures:** No data available.

**Occupational Exposure Limits:** None known.

**Personal protective equipment (ppe)**

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<b>Respiratory Protection:</b>	Wear air supplied respiratory protection.
<b>Eye Protection:</b>	Face shield
<b>Hand Protection:</b>	No data available.
<b>Skin Protection:</b>	Long sleeves Safety shoes
<b>Hygiene measures:</b>	

**9 PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless, /, Yellow
<b>Odor:</b>	amine like
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	-80 °C
<b>Boiling Point:</b>	190 °C (1,013 hPa)
<b>Flash Point:</b>	74 °C (ASTM D 93)
<b>Evaporation Rate:</b>	0.08
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%):</b>	5.1 %(V) (BDMAEE)
<b>Flammability Limit - Lower (%):</b>	1 %(V) (BDMAEE)
<b>Vapor pressure:</b>	68.9 hPa (38 °C)
<b>Vapor density (air=1):</b>	> 1
<b>Density:</b>	0.9020 g/cm <sup>3</sup> (25 °C)
<b>Relative density:</b>	ca. 0.9
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water) Log Pow:</b>	No data available.
<b>Autoignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>SADT:</b>	No data available.
<b>Viscosity, dynamic:</b>	No data available.
<b>Viscosity, kinematic:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

**10 STABILITY AND REACTIVITY**

<b>Incompatible Materials:</b>	Avoid contact with: Strong oxides. Acids. Halogens.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerisation does not occur.

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<b>Conditions to avoid:</b>	None known.
<b>Hazardous Decomposition Products:</b>	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.

<b>11 TOXICOLOGICAL INFORMATION</b>
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**Information on likely routes of exposure**

<b>Inhalation:</b>	No data available.
<b>Ingestion:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

**Information on toxicological effects**

**Acute toxicity**

<b>Oral</b>	
<b>Product:</b>	LD 50 (Rat, males): 1,410 mg/kg
<b>Dermal</b>	
<b>Product:</b>	LD 50 (Rabbit, males): 400 mg/kg

<b>Inhalation</b>	
<b>Product:</b>	No data available.

<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

<b>Specified substance(s)</b>	
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	No data available.
Tertiary Amine	No data available.

<b>Skin Corrosion/Irritation:</b>	
<b>Product:</b>	(Rabbit): Corrosive Corrosive.

<b>Serious Eye Damage/Eye Irritation:</b>	
<b>Product:</b>	(Rabbit): Corrosive

<b>Respiratory or Skin Sensitization:</b>	
<b>Product:</b>	No data available. (Guinea Pig)Did not cause sensitization on laboratory animals.

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**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) Overall weight of evidence:: negative

Tertiary Amine No data available.

**In vivo**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)

2-[2-(Dimethylamino)ethoxy]ethanol/Tertiary Amine No data available.

**Carcinogenicity**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Aspiration Hazard**

**Product:** No data available.

**Specified substance(s)**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Metabolism:** No data available.

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**Other effects:** 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.

**12 ECOLOGICAL INFORMATION**

**General information:** not applicable

**Ecotoxicity**

**Acute toxicity**

**Fish**

**Product:** No data available.

**Specified substance(s):**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Chronic Toxicity**

**Fish**

**Product:** No data available.

**Specified substance(s):**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

**Toxicity to Aquatic Plants**

**Product:** LC50 (Algae): 23 mg/l Literature Reference

**Persistence and Degradability**

**Biodegradation**

**Product:** Literature Reference

**BOD/COD Ratio**

**Product:** No data available.

**Specified substance(s):**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.

Tertiary Amine No data available.

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**Bioaccumulative Potential**

**Product:** No data available.

**Specified substance(s):**  
 N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) Potential to bioaccumulate is low.  
 Tertiary Amine No data available.

**Mobility in Soil:** No data available.

**Known or predicted distribution to environmental compartments**

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.  
 Tertiary Amine No data available.

**Results of PBT and vPvB assessment:** No data available.

N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine) No data available.  
 Tertiary Amine No data available.

**Other Adverse Effects:** No data available.

**13 Disposal considerations**

**Disposal methods:** Can be incinerated when in compliance with local regulations.

**14 TRANSPORT INFORMATION**

**ADR/RID**

UN Number: UN 2735  
 Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.(Bis(2-dimethylaminoethyl)ether)  
 Transport Hazard Class(es): 8  
 Subsidiary risk label: –  
 Packing Group: II  
 Label(s): 8

**IMDG - International Maritime Dangerous Goods Code**

UN Number: UN 2735  
 UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.(Bis(2-dimethylaminoethyl)ether)  
 Transport Hazard Class(es): 8  
 Subsidiary risk label: –  
 Packing Group: II  
 Label(s): 8  
 Marine Pollutant:  
 EmS No.: F-A; S-B

**IATA**

UN Number: UN 2735  
 Proper Shipping Name: Amines, liquid, corrosive, n.o.s.(Bis(2-dimethylaminoethyl)ether)  
 Transport Hazard Class(es):  
 Class: 8  
 Label(s): 8  
 Packing Group: II



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Cargo aircraft only Packing Instructions:	855
Passenger and cargo aircraft Packing Instructions:	855
Limited quantity:	0.50L
Packing Instructions:	Y840
Excepted quantity	E2
Environmental Hazards:	Not regulated.
Marine Pollutant:	No

**15 REGULATORY INFORMATION**

**Applicable regulations:**

- Factories Act
- Act on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- Environmental Public Health Act
- Environmental Public Health (Toxic Industrial Waste) Regulations
- Singapore. Hazardous Substances Control List (Environmental Protection and Management Act, Second Schedule, Part 1, Control of Hazardous Substances)
- Environmental Pollution Control (Hazardous Substances) Regulations

**16 OTHER INFORMATION**

**Inventory Status**

Australia AICS:	y (positive listing)
EU EINECS List:	y (positive listing)
Japan (ENCS) List:	y (positive listing)
China Inventory of Existing Chemical Substances:	y (positive listing)
Korea Existing Chemicals Inv. (KECI):	y (positive listing)
Canada DSL Inventory List:	y (positive listing)
Canada NDSL Inventory:	n (Negative listing)
New Zealand Inventory of Chemicals:	y (positive listing)
Philippines PICCS:	y (positive listing)
US TSCA Inventory:	y (positive listing)
Taiwan. Taiwan inventory (CSNN):	y (positive listing)

**Revision Information:**

**Issue Date:** 2016/05/13

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**Disclaimer:**

**Notice to reader**

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives.

**Further Information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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