# **Safety Data Sheet**

gpcsilicones.com



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## 1 - PRODUCT AND COMPANY IDENTIFICATION

## 1.1 Product Identifiers

PRODUCT NAME: GP-172
PRODUCT NUMBER: C-2230-BULK

**DESCRIPTION:** DIST. N2AMINOETHYL-3AMINOPROPYLMETHYLDIMETHOXYSILANE

**CAS NUMBER:** 3069-29-2 **EC NUMBER:** 221-336-6

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

**USE OF SUBSTANCE: Industrial /** Chemical intermediate

1.3 Company Identifiers

**MANUFACTURER:** Genesee Polymers Corporation

G-4099 S. Dort Hwy. Burton, MI 48529

Tel (810) 715-5018 Fax (810) 742-8581 Email: cpiskoti@gpcsilicones.com

1.4 Emergency Contact Information

**24 HR. EMERGENCY PHONES: CHEM\*TEL** (800) 255-3924 (Domestic) / (813) 248-0585 (International)

Contract Number: MIS0002539

## 2 - HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008

Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

H227: Combustible Liquid.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R36/38 Irritating to eyes and skin.

Information concerning particular hazards for human and environment:

Not Applicable

# 2.2 GHS Label elements, including precautionary statements

# Labelling according to Regulation (EC) No 1272/2008

The product is additionally classified and labelled according to the Globally Harmonized System within the United States. (GHS) The substance is classified and labelled according to the CLP regulation.







SIGNAL WORD: Danger

## HAZARD DETERMINING COMPONENTS OF LABELLING:

3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane

#### HAZARD STATEMENTS

H317 May cause an allergic skin reaction.

H318: Causes serious eye damage.

H227 Combustible liquid

# PRECAUTIONARY STATEMENTS

P261 Avoid breathing mist/vapours/spray.

P272: Contaminated work clothing must not be allowed out of the workplace.

P280: Wear protective gloves/eye protection/face protection.

P302+P352 IF ON SKIN: wash with plenty of water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P333+P313 If skin irritation or rash occurs; Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

## **HAZARD DESCRIPTION:**

## WHMIS-SYMBOLS:

N/A

NFPA-ratings (scale 0-4)

Health	2
Flammability	1
Reactivity	2

## HMIS-ratings (scale 0-4)

Health	2
Flammability	1
Reactivity	2
Personal Protection	Н

## HMIS LONG TERM HEALTH SUBSTANCES

Substance is not listed.

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## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Results of PBT and vPvB assessment:

PBT: Not applicable vPvB: Not applicable

#### 3 – HAZARDS IDENTIFICATION

3.1 Substances

**Description:** 3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane

**CAS-No.:** 3069-29-2 **EC-No.:** 221-336-6

## **Hazardous components:**

COMPONENT	CLASSIFICATION	CONCENTRATION
Impurities and stabilising additives:	FLAM. LIQ. 2 H225	< 2%
methanol	EYE IRRIT. 2, H319	
CAS: 67-56-1		
EINECS: 200-659-6		
Index number: 603-001-00-X		

## 4 – FIRST-AID MEASURES

## 4.1 Description of first aid measures

**GENERAL INFORMATION:** Immediately remove any clothing soiled by the product. Consult a physician. Show this safety

data sheet to the doctor in attendance. Take affected persons out into fresh air.

BREATHING (INHALATION): Supply fresh air; consult doctor in case of complaints. In case of irregular breathing or respiratory

arrest provide artificial respiration.

**SKIN (DERMAL):** Immediately remove any clothing soiled by the product.

Immediately wash with soap and water and rinse thoroughly.

If skin irritation is experienced, consult a doctor.

**EYES:** Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**SWALLOWING (INGESTION):** Do not induce vomiting; call for medical help immediately.

Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

Gastric or intestinal disorders when ingested.

Coughing.

Irritant to skin and mucous membranes.

Irritant to eyes.

Difficulty breathing

Nausea in case of ingestion.

On contact with water this compound liberates methanol which is known to have a chronic effect on the central nervous system.

**HAZARDS:** Danger of impaired breathing.

Vapours may cause drowsiness and dizziness.

# 4.3 Indication of any immediate medical attention and special treatment needed

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol.

# 5 – FIRE-FIGHTING MEASURES

## 5.1 Extinguishing media

# Suitable extinguishing agents:

Alcohol resistant foam.

Fire-extinguishing powder.

Carbon dioxide.

Gaseous extinguishing agents.

#### For safety reasons unsuitable extinguishing agents: Water.

# 5.2 Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

#### **5.3** Advice for firefighters

## **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

## Additional information

Eliminate all ignition sources if safe to do so.

Cool endangered receptacles with water spray.

## 6 - ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

Ensure adequate ventilation.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

## **6.2 Environmental precautions:**

Do not allow to enter sewers/surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

## 6.3 Methods and material for containment and clean up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders.)

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Send for recovery or disposal in suitable receptacles.

#### **6.4** Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment

See Section 13 for disposal information.

## 7 – HANDLING and STORAGE

#### 7.1 Precautions for safe handling

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

## **Information about fire – and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Flammable gas-air mixtures may form in empty receptacles.

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage:** 

Requirements to be met by storerooms and receptacles:

Store in a cool, dry place.

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

# Information about storage in one common storage facility:

Store away from foodstuffs.

Protect from humidity and water.

Do not store together with oxidising and acidic materials.

## **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

# 7.3 Specific end use(s)

No further relevant information available.

## 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7

## **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

Ingredient	CAS number	Data type	Value
methanol	67-56-1	ACGIH, TWA	200 ppm
methanol	67-56-1	ACGIS, STEL	250 ppm

**DNELs** No further relevant information available.

**PNECs** No further relevant information available.

# Ingredients with biological limit value

Ingredient	CAS number	Data type	Value
None	N/A	N/A	N/A

**Additional information:** The lists valid during the making were used as basis.

#### **8.2 Exposure controls**

# Personal protective equipment:

## General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Use only in well ventilated areas

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

## **Respiratory protection:**

Use suitable respiratory protective device when high concentrations are present.

Use suitable respiratory protective device when aerosol or mist is formed.

Use suitable respiratory protective device in case of insufficient ventilation.

# **Protection of hands:**



## **Protective gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

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#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

# Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

## **Eye protection:**



## **Body protection:**

Protective work clothing

# Limitation and supervision of exposure into the environment

Avoid release to the environment.

## Risk management measures

See section 7 for additional information. No further relevant information available.

#### 9 - PHYSICAL / CHEMICAL PROPERITES

# 9.1 Information on basic physical and chemical properties

**General Information** 

Appearance:

Form: Liquid.
Colour: Colourless
Odour: Ammonia-like
Odour threshold: Not determined.
pH value: Not determined.

**Change in condition:** 

Melting point/Melting range: <0 ° C (< 32 °F)

**Boiling point/Boiling range:** 96 ° C (205 ° F) @ 30 mm Hg

Flash point: 90 ° C (194 ° F)
Flammability (solid, gaseous): Not applicable.

Auto/Self-ignition temperature: 280 ° C (536 ° F)

Decomposition temperature: Not determined.

Self-igniting: Not determined.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Explosion limits:** 

Lower:

Upper:

Not determined.

Not determined.

Vapor pressure:

Not determined.

Not determined.

1 g/cm³ (8.345 lbs/gal)

Relative density:

Vapour density at 20 °C

Evaporation rate:

Not determined.

Not determined.

Solubility in / Miscibility with

Water: Reacts with water

**Partition coefficient** 

(n-octanol/water) Not determined.

Viscosity:

Dynamic: Not determined.Kinematic: Not determined.VOC content: Not determined.

**9.2 Other information** No further relevant information available.

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# 10 - STABILITY and REACTIVITY

#### 10.1 Reactivity

#### 10.2 Chemical stability

# Thermal decomposition / conditions to be avoided

Keep away from heat and direct sunlight.

# 10.3 Possiblility of hazardous reactions

Combustible liquid.

Reacts with strong acids.

Reacts with water.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

Toxic fumes may be released if heated above the decomposition point.

## 10.4 Conditions to avoid

Moisture

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

Keep away from heat and direct sunlight.

## **10.5** Incompatible materials:

Keep away from water. Reacts with water and moisture in air to liberate methanol.

# 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide.

Methanol in case of hydrolysis.

## 11 - TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute toxicity (LD/LC50 values):

Ingredient	CAS Number	Data Type	Value
3-(2-Aminoethyl)-	3069-29-2	Oral LD50	>2,000 mg/kg (rat)
Aminopropylmethyldimethoxysilane			

#### **Primary irritant effect:**

On the skin: Irritant to skin and mucous membranes.

On the eye: Causes serious eye damage Sensitisation: May cause allergic reaction

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

# Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for

Preparations as issued in the latest version. Irritant

## **STOT-single exposure**

Causes damage to the central nervous system and optic nerve.

## STOT-repeated exposure

## 12 - ECOLOGICAL INFORMATION

#### 12.1 Toxicity

**Aquatic toxicity:** The following ingredients are harmful to the environment:

3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane

CAS #3069-29-2

LC50 - 96h (Fish)

EC50 - 48h (Daphnia)

EC50 - 72h (Algae)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

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#### Additional ecological information:

#### **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

# 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable. **PvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

## 13 - DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### Recommendation

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

# Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

## 14 - TRANSPORTATION INFORMATION

# 14.1 Transport hazard information

DOT

UN Number: UN2735

**Proper shipping name:** AMINE, LIQUID, CORROSIVE, N.O.S. (3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane)

**Hazard class:** 8 Corrosive substances.

Packing group: III



**ADR** 

UN Number: UN2735

**Proper shipping name:** AMINE, LIQUID, CORROSIVE, N.O.S. (3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane)

**Hazard class:** 8 (C1) Corrosive substances.

Packing group: III



**IMDG** 

UN Number: UN2735

**Proper shipping name:** AMINE, LIQUID, CORROSIVE, N.O.S. (3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane)

**Hazard class:** 8 Corrosive substances.

Packing group: III



**IATA** 

UN Number: UN2735

**Proper shipping name:** AMINE, LIQUID, CORROSIVE, N.O.S. (3-(2-Aminoethyl)-Aminopropylmethyldimethoxysilane)

**Hazard class:** 8 Corrosive substances.

Packing group: III



14.2 Environmental hazards:

**Marine pollutant:** No

14.3 Special precautions for user: Warning: Corrosive substances.

Danger code: Not applicable
MS Number: F-A, S-B
Transport in bulk according to AnnexII of
MARPOL73/78 and the IBC Code: Not applicable

UN "Model Regulation": UN 2735, AMINE, LIQUID, CORROSIVE, N.O.S. (3-(2-Aminoethyl)-

Aminopropylmethyldimethoxysilane), 8, III

#### 15 - REGULATIONS

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**United States (USA)** 

SARA

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed

**Proposition 65 (California)** 

Chemicals known to cause cancer:

Substance is not listed

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Present in trace quanitites: Methanol.

**Carcinogenic Categories** 

**EPA** (Environmental Protection Agency)

Substance is not listed.

IARC (International Agency for Research on Cancer):

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH):

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

Substance is not listed.

Canada

**Canadian Domestic Substances list:** 

Substance is listed.

Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%):

Substance is listed.

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## Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Substances of very high concern (SVHC) according to REACH, Article 57:

Substance is not listed.

#### 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

## 16 - OTHER INFORMATION

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damages, direct or indirect, as a result of their use.

# Abbreviations and acronyms:

ADR: Accord europeen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commerical Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical society)

HMIS: Hazardous Materials Identification System (Canada)

WHMIS: Workplace Hazardous Materials Information System (Canada)

PNEC: Predicted No-Effect Concentration (REACH)

LC50 Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin irrit. 2 Skin corrosion/irritaton, Hazard Category 2

Eye Irrit. 2 Serious eye damage/eye irritation, Hazard Category 2

## **Sources**

SDS Prepared by:

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