

Material Safety Data Sheet

3-Glycidoxypropyltrimethoxysilane, 97+%

ACC# 64245

Section 1 - Chemical Product and Company Identification

MSDS Name: 3-Glycidoxypropyltrimethoxysilane, 97+%

Catalog Numbers: AC216540000, AC216540050, AC216541000, AC216545000

Synonyms: GLYMO; Silane, 3-(2,3-epoxypropoxy)propyltrimethoxy-; 3-(2,3-Epoxypropoxy)propyltrimethoxysilane; gamma-Glycidoxypropyltrimethoxysilane; Silane, trimethoxy(3-(oxiranylmethoxy)propyl)-; 3-(Trimethoxysilyl)propyl glycidyl ether.

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
2530-83-8	3-Glycidoxypropyltrimethoxysilane	>97	219-784-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

Warning! Causes eye, skin, and respiratory tract irritation. May be harmful if absorbed through the skin. Contact with moisture liberates methanol.

Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression.

Inhalation: May cause respiratory tract irritation.

Chronic: May cause reproductive and fetal effects. Effects may be delayed. Laboratory experiments have resulted in mutagenic effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with water liberates highly flammable gases.

Extinguishing Media: Do NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 122 deg C (251.60 deg F)

Autoignition Temperature: 400 deg C (752.00 deg F)

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0; Special Hazard: -W-

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use with adequate ventilation. Do not allow contact with water. Keep from contact with moist air and steam. Avoid breathing vapor or mist.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
3-Glycidioxypropyltrimethoxysilane	none listed	none listed	none listed

OSHA Vacated PELs: 3-Glycidioxypropyltrimethoxysilane: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: 8.15

Evaporation Rate: Not available.

Viscosity: 4 MPA 20.00 deg C

Boiling Point: 120 deg C @ 2 mmHg

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Reacts.

Specific Gravity/Density: 1.0700 g/cm³

Molecular Formula: C₉H₂₀O₅Si

Molecular Weight: 236.34

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Material generates methanol on contact with water or moisture on the skin, eyes and mucous membranes.

Conditions to Avoid: Excess heat, Reacts with water to form methanol. The heat of the reaction may ignite the vapor of the alcohol.

Incompatibilities with Other Materials: Water, strong oxidizing agents, strong acids.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, silicon dioxide, formaldehyde, methanol.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 2530-83-8: VV4025000

LD50/LC50:

CAS# 2530-83-8:

Draize test, rabbit, eye: 100 mg Mild;

Oral, rat: LD50 = 22600 uL/kg;

Skin, rabbit: LD50 = 3970 uL/kg;

Carcinogenicity:

CAS# 2530-83-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: Oral, rat: TDLo = 30 gm/kg (female 6-15 day(s) after conception) Specific Developmental Abnormalities - musculoskeletal system.

Reproductive Effects: Oral, rat: TDLo = 30 gm/kg (female 6-15 day(s) after conception) Maternal Effects - other effects. Reproductive - Specific Developmental Abnormalities - musculoskeletal system

Mutagenicity: Mutation in Microorganisms: Salmonella typhimurium = 100 ug/plate.

Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 2530-83-8 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 2530-83-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 21 Harmful in contact with skin.
R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 2530-83-8: 1

Canada - DSL/NDL

CAS# 2530-83-8 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

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

Canadian Ingredient Disclosure List

CAS# 2530-83-8 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 9/02/1997

Revision #6 Date: 7/09/2004

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.