SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Glass Bond Product Number: EC-620

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics 305 Patton Drive Atlanta, GA 30036 (404) 699-2121 (800) 526-3867 info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340 1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands) 01-800-099-0731 (Mexico) 400-120-0751 (China) 000-800-100-4086 (India) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) +1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP] H315 - Skin Corrosion/Irritation (Category 2)

H319 - Serious Eye Damage/Eye Irritation (Category 2A)

H335 - Specific Target Organ Toxicity, Single Exposure (Category 3)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements



H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.
P261 - Avoid breathing fumes/gas/mist/vapors/spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position

comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P332+P313-P337+P313 - If skin irritation occurs: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.
P501C - Dispose of contents/ container to an approved waste disposal plant.

2.3 Other Hazards

None found

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Names/Description

Proprietary Organo-Silane

Chemical Formula

C₁₀H₂₀O₅Si

Component List

Component	% Comp.	CAS#	EC#
3-(methacryloyloxy)propyltrimethoxysilane	100	2530-85-0	219-785-8

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

DO NOT INDUCE VOMITING. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Coughing, shortness of breath.

Ingestion

No data.

Skin

Redness, pain.

Eyes

Redness, pain.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry powder, foam, carbon dioxide. (Water may be ineffective.)

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Toxic gases may be involved in fires of this product.

Hazardous Decomposition Products

No data

Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Mix with sand or similar inert absorbent material, sweep up and keep in a tightly closed container for disposal.

6.4 References to Other Sections

For disposal information see Section 13. For protective clothing and equipment see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

Incompatibles

Oxidizing agents. May decompose on exposure to moist air or water.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

ACGIH Threshold Limit Value (TLV):

OSHA Permissible Exposure Limit (PEL):

None established

8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures low. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source

Respiratory Protection

For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a fullfacepiece positive-pressure, air-supplied respirator.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Colorless liquid	b. Odor	None
c. Odor Threshold	N.A.	d. pH	No data
e. Melting/Freezing Point (°C)	-20	f. Boiling point (°C)	250
g. Flash Point (°C)	92	h. Evaporation Rate	No data
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	No data
k. Vapor Pressure	No data	I. Vapor Density (Air = 1)	No data
m. Relative Density	No data	n. Water Solubility	Immisc.
o. Partition Coefficient n-octanol/ water	log Kow 2.1	p. Autoignition Temperature (°C)	275
a Decomposition Temperature	NI A	r Viccocity	No data ave

No data available. q. Decomposition Temperature N.A. r. Viscosity

(°C)

s. Explosive Properties N.A. t. Oxidizing Properties N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with glass surfaces. Polymerizes with radical initiators.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

Heat, flames, and sparks.

10.5 Incompatible Materials

Oxidizing agents. May decompose on exposure to moist air or water.

10.6 Hazardous Decomposition Products

No data

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

22600

Dermal Rabbit LD50 (mg/kg)

> 20 mL/kg

Component Cancer List Status

	NIP Carcinogen		
	Known	Anticipated	IARC Category
3-(methacryloyloxy)propyltrimethoxysilane	No	No	None

NTD Carainagen

Potential Health Effects

Inhalation

Irritating to respiratory tract.

The toxicological properties of this material have not been fully investigated.

Skin

Irritating to skin.

Eves

Irritating to eyes.

Carcinogenicity

No data.

Mutagenicity

No data.

Reproductive Toxicity

No data.

Teratogenic Effects

No data.

Routes of Entry

No data.

Target Organ Statement

No data.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	vertebrates	invertebrates	Algae	Microorganisms
Aquatic Toxicity	NOEC (96hr,	NOEC (48hr, daphnia)	NOEC 100mg/l	NOEC 1000mg/I
(ppm unless otherwise noted)	zebrafish) 100mg/l	100mg/l		
	Birds	Arthropods	Plants	Microorganisms

	Biras	Arthropods	Piants	wicroorganisms
Terrestrial Environment Toxicity	No data	No data	No data	No data
(ppm unless otherwise noted)				

12.2 Persistence and Degradability

Biodegradable (69% in 28 days)

12.3 Bioaccumulative Potential

12.4 Mobility in Soil

12.5 Results of PBT and vPvB Assessment

12.6 Other Adverse Effects

None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N/A	N/A	N/A	N/A
14.2 Shipping Name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Hazard Class	N/A	N/A	N/A	N/A
14.4 Packing Group	N/A	N/A	N/A	N/A
14.5 Environmental Hazards	N.A.	N.A.	Not regulated	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
3-(methacryloyloxy)propyltrimethoxysilane	Yes	No	No	Yes	No

Europe

EEC Regulatory
All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/30/2019 - Updated Sections 2.1, 2.2 and 3.1 4/26/2019 - Updated Section 1.4 5/29/2015 - Updated Sections 2.1 and 3.1

12/11/2013 - Released Version 1.0

NFPA Codes

Health N/A Flammability N/A Reactivity N/A

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