55 W.L. Runnels Industrial Drive; Hattiesburg, MS 39401

SAFETY DATA SHEET

SECTION 1: Identification

1.1. Identification

Product Name	: Nanosilica Dispersion Acrylate POSS®
Product Number	: MA0736.80.30
Product form	: Mixture
Physical State	: Viscous Liquid
Formula	: $(C_6H_9)_n(SiO1.5)_n•(SiO_2)$
Synonyms	: Nanosilica dispersed in acrylate-functional polysilsesquioxanes

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

Use of the substance/mixture : Scientific research and development, intermediate.

1.3. Details of the supplier of the safety data sheet

Hybrid Plastics55
Runnels Dr.
Hattiesburg, MS 39401 - USA
T +1.601.544.3466 - F +1.601.545.3103
info@hybridplastics.com

1.4. Emergency telephone number

Emergency number	: US & Canada	1.800.255.3924
	: International	+01.813.248.0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

No labelling applicable

2.3. Hazards not otherwise classified (HNOC)

Hazards not contributing to the classification : May be slightly irritating to eyes, respiratory system, and skin.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not Applicable

3.1. Mixture

Name	Product identifier	EC#	%	GHS-US classification
2-Propenoic acid, 1,1',1'',1''',1'''',1''''',1''''''',1'''''''-(pentacyclo[9.5.1.1^{3,9}.1^{5,15}.1^{7,13}]octasiloxane-1,3,5,7,9,13,15-octaylocta-3,1-propanediyl) ester	1620202-27-8	NA	65-75	Not classified
2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, reaction products with silica	100402-78-6	309-515-8	25-35	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : May be slightly irritating to eyes, respiratory system and skin.

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Prolonged or repeated contact may cause skin to become dry or cracked. Wash skin with mild soap and water.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting unless directed to do so by medical personnel.

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

Symptoms/injuries : Excessive dust production may cause minor irritation to eyes and respiratory tract.

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

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : If there is a fire nearby, use suitable extinguishing agents. Water spray, foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media : None known.

5.1. Special hazards arising from the substance or mixture

Explosion hazard : Product is not explosive.

Reactivity : Normally stable, even under fire exposure conditions, and not reactive with water.

5.2. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures : Avoid creating or spreading dust. Dust deposited may be vacuum cleaned. Use a HEPA filter.

6.1.1. For non-emergency personnel

Protective equipment : Avoid contact with skin and eyes. Wear dust impervious gloves; Chemical goggles or safety glasses.

Emergency procedures : Avoid all unnecessary exposure. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Wear dust impervious gloves; Chemical goggles or safety glasses.

Emergency procedures : Collect as much as possible in a clean container for (preferable) reuse or disposal. No additional risk management measures required.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Scoop spilled substance into containers; if appropriate, moisten first to prevent dusting. Dust deposited may be vacuum cleaned; use a high efficiency particulate air filter (HEPA filter).

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment. Section 13: disposal information.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid dust formation.

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.1. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a dry, cool and well-ventilated place. Store in correctly labelled containers. Keep container closed when not in use.
Prohibitions on mixed storage	: None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, reaction products with silica (100402-78-6)		
ACGIH	ACGIH TWA (mg/m³)	15 mg/m³ nuisance dust

8.2. Exposure controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation to minimize exposure to dust.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Dust impervious gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material. Use air-purifying respirator equipped with particulate filtering cartridges.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid
Color	: Colorless to pale yellow/brown
Odor	: Faint acrylate-like
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: Insoluble in water
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.1. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

Normally stable, even under fire exposure conditions, and not reactive with water.

10.1. Chemical stability

Stable under normal conditions.

10.2. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.3. Conditions to avoid

Heat, open flame, sparks Incompatible materials

No additional information available

10.4. Hazardous decomposition products

Carbon oxides (CO, CO2). Silicon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Dermal; Inhalation
Acute toxicity	: Not classified.
Skin corrosion/irritation	: Not classified. (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified. (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified. (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
Specific target organ toxicity (single exposure)	: Not classified.
Specific target organ toxicity (repeatedexposure)	: Not classified.
Aspiration hazard	: Not classified. (Based on available data, the classification criteria are not met)
Potential adverse human health effects and Symptoms	: Dust may irritate respiratory tract and eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecotoxicological data about this product are known. Keep product out of sewers and waterways.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT

Not considered a dangerous good for transport regulations

TDG

No additional information available

Transport by sea

No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

US Federal regulations

2-Propenoic acid, 1,1',1'',1''',1'''',1''''',1''''''',1'''''''-(pentacyclo[9.5.1.1^{3,9}.1^{5,15}.1^{7,13}]octasiloxane-1,3,5,7,9,13,15-octaylocta-3,1-propanediyl) ester (70131-69-0) : LVE on the United States TSCA (Toxic Substances Control Act) inventory.

2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, reaction products with silica (100402-78-6)
: Listed on the United States TSCA (Toxic Substances Control Act) inventory.

15.1. International regulations

EU-Regulations
No additional information available

15.2. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

SECTION 16: Other information

Indication of changes	: Original Document. Version 1.0
Date Prepared	: 01.25.2022
Data sources	: ACGIH (American Conference of Government Industrial Hygienists). Internal Company test data.
NFPA health hazard	: 1 - Slight Hazard - Irritation or minor reversible injury Possible.
NFPA fire hazard	: 1 - Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions,and not reactive with water.

SDS US (GHS HazCom 2012)

SDS prepared and reviewed by:
Safety and Environmental Group

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product The information and recommendations contained in this Safety Data Sheet are from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. While the above information is believed to be accurate, no warranty, guaranty, or representation is made as to the correctness or sufficiency of the information and the information is intended only as a guide. Hybrid Plastics shall not be held liable for any damage resulting from handling or from contact with this product. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine environmental regulatory compliance obligations under any applicable laws.