

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 19/12/2018 Date of issue: 18/11/2013

Version: 3.0

SECTION 1: Identification of the Substance/mixture and of the Company/Undertaking

1.1. Product Identifier

Product form Mixture
Product Name FS1-3730
Synonyms Fluorosilicone Adhesive

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture For professional use only.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
ehs@nusil.com
www.nusil.com

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC
(International and Maritime)

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1B H314
Eye Dam. 1 H318
STOT SE 3 H335

Full text of hazard classes and H-statements : see section 1.6

2.2. Label Elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP]

Hazard Pictograms (CLP)



GHS05

GHS07

Signal Word (CLP)

Danger

Hazardous Ingredients

Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl, hydroxy-terminated; Silanetriol, ethyl-, triacetate

Hazard Statements (CLP)

H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.

Precautionary Statements (CLP)

P260 - Do not breathe mist, spray, vapours.
P264 - Wash hands, forearms and face thoroughly after handling.

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P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face shield, protective clothing, protective gloves.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340 - IF INHALED: Remove person to fresh air and keep 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.
P310 - Immediately call a POISON CENTER or doctor
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P321 - Specific treatment (see SECTION 4 on this SDS)
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH014 - Reacts violently with water.

EUH-statements

2.3. Other Hazards

Other Hazards Not Contributing to the Classification

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl, hydroxy-terminated	(CAS-No.) 68607-77-2	70 - 90	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Silanetriol, ethyl-, triacetate	(CAS-No.) 17689-77-9 (EC-No.) 241-677-4	< 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First Aid Measures

4.1. Description of First-aid Measures

First-Aid Measures General

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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First-Aid Measures After Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-Aid Measures After Skin Contact	Remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.
First-Aid Measures After Eye Contact	Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-Aid Measures After Ingestion	Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects	Causes severe skin burns and eye damage. May cause respiratory irritation.
Symptoms/Effects After Inhalation	Irritation of the respiratory tract and the other mucous membranes. May be corrosive to the respiratory tract.
Symptoms/Effects After Skin Contact	Causes severe irritation which will progress to chemical burns.
Symptoms/Effects After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Effects After Ingestion	May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Symptoms	None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media	Water spray, dry chemical, foam, carbon dioxide.
Unsuitable Extinguishing Media	Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard	Not considered flammable but may burn at high temperatures.
Explosion Hazard	Product is not explosive.
Reactivity	May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.
Hazardous Decomposition Products in Case of Fire	Carbon oxides (CO, CO ₂). Silicon oxides. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours. Formaldehyde is a potential carcinogen and can act as a skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

5.3. Advice for Firefighters

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
Firefighting Instructions	Do not allow run-off from fire fighting to enter drains or water sources. Do not breath fumes from fires or vapors from decomposition. Use water spray or fog for cooling exposed containers.

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Protection During Firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment Use appropriate personal protective equipment (PPE).

Emergency Procedures Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment Equip cleanup crew with proper protection.

Emergency Procedures Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods For Cleaning Up Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Contact competent authorities after a spill. Transfer spilled material to a suitable container for disposal.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed May release corrosive vapors.

Precautions for Safe Handling Avoid all eyes and skin contact and do not breathe vapour and mist.

Hygiene Measures Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures Comply with applicable regulations.

Storage Conditions Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store locked up. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials Strong acids, strong bases, strong oxidizers.

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7.3. Specific End Use(S)

For sealing and bonding applications requiring solvent and/or fuel resistance. For professional use only.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

No additional information available

8.2. Exposure Controls

Appropriate Engineering Controls

Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Gloves. Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

Corrosion-proof clothing.

Hand Protection

Wear chemically resistant protective gloves.

Eye Protection

Chemical safety goggles and face shield.

Skin and Body Protection

Wear suitable protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

When using, do not eat, drink or smoke.

SECTION 9: Physical and Chemical Hazards

9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Colour	Colourless
Odour	Acetic acid
Odour Threshold	No data available
pH	No data available
Evaporation Rate	No data available
Melting Point	No data available
Freezing Point	No data available
Boiling Point	No data available
Flash Point	> 135 °C (275 °F)
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (Solid, Gas)	No data available
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	> 1 (water = 1)
Solubility	No data available

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Partition Coefficient n-Octanol/Water	No data available
Viscosity, Kinematic	No data available
Viscosity, Dynamic	No data available
Explosive Properties	No data available
Oxidising Properties	No data available
Explosive Limits	Not applicable

9.2. Other Information

VOC content < 1 %

SECTION 10: Stability and Reactivity

10.1. Reactivity

May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility Of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions To Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

Thermal decomposition generates: Carbon oxides (CO, CO₂). Silicon oxides. Corrosive vapours. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity Not classified

Silanetriol, ethyl-, triacetate (17689-77-9)	
LD50 Oral Rat	1460 mg/kg
LD50 Oral	1462 mg/kg

Skin Corrosion/Irritation Causes severe skin burns and eye damage.

Eye Damage/Irritation Causes serious eye damage.

Respiratory or Skin Sensitization Not classified

Germ Cell Mutagenicity Not classified

Carcinogenicity Not classified

Reproductive Toxicity Not classified

Specific Target Organ Toxicity (Single Exposure) May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure) Not classified

Aspiration Hazard Not classified

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SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General Harmful to aquatic life.

12.2. Persistence and Degradability

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Persistence and Degradability	Not established.
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12.3. Bioaccumulative Potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other Adverse Effects

Other Information Avoid release to the environment.

SECTION 13: Disposal Considerations






13.1. Waste Treatment Methods

Product/Packaging Disposal Recommendations	Dispose of contents/container in accordance with local, regional, national, and international regulations.
Additional Information	Container may remain hazardous when empty. Continue to observe all precautions.
Ecology - Waste Materials	Avoid release to the environment.

SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN Number				
1760	1760	1760	1760	1760
14.2. UN Proper Shipping Name				
CORROSIVE LIQUID, N.O.S. ((Contains: Silanetriol, ethyl-, triacetate))	CORROSIVE LIQUID, N.O.S. ((Contains: Silanetriol, ethyl-, triacetate))	CORROSIVE LIQUID, N.O.S. ((Contains: Silanetriol, ethyl-, triacetate))	CORROSIVE LIQUID, N.O.S. ((Contains: Silanetriol, ethyl-, triacetate))	CORROSIVE LIQUID, N.O.S. ((Contains: Silanetriol, ethyl-, triacetate))
14.3. Transport Hazard Class(Es)				
8	8	8	8	8
				
14.4. Packing Group				
II	II	II	III	III

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ADR	IMDG	IATA	ADN	RID
14.5. Environmental Hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special Precautions For User

No additional information available

14.7. Transport in Bulk According to Annex II of MARPOL and The IBC Code

Not applicable

SECTION 15: Regulatory Information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Silanetriol, ethyl-, triacetate (17689-77-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.2. National Regulations

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

Indication of Changes

Section	Section Header	Change	Date Changed
		Modified template	19/12/2018
4	First aid measures	Modified	19/12/2018
12	Ecological information	Modified	19/12/2018

Date of Preparation or Latest Revision 19/12/2018

Revision

Data Sources

Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

Other Information

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Full Text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

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Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
EUH014	Reacts violently with water.

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR – European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE – Acute Toxicity Estimate
BCF – Bioconcentration Factor
BEI – Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. – Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 – Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) – IMDG Emergency Schedule Fire
EmS-No. (Spillage) – IMDG Emergency Schedule Spillage
EU – European Union
ErC50 – EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC – International Agency for Research on Cancer
IATA – International Air Transport Association
IBC Code – International Bulk Chemical Code
IMDG – International Maritime Dangerous Goods
IPRV – Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 – Median Lethal Concentration
LD50 – Median Lethal Dose
LOAEL – Lowest Observed Adverse Effect Level
LOEC – Lowest-Observed-Effect Concentration
Log Koc – Soil Organic Carbon-water Partitioning Coefficient
Log Kow – Octanol/water Partition Coefficient
Log Pow – Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration

MARPOL – International Convention for the Prevention of Pollution
NDS – Najwyższe Dopuszczalne Stezenie
NDSCh – Najwyższe Dopuszczalne Stezenie Chwilowe
NDSP – Najwyższe Dopuszczalne Stezenie Pulapowe
NOAEL – No-Observed Adverse Effect Level
NOEC – No-Observed Effect Concentration
NRD – Nevirsytinas Ribinis Dydis
NTP – National Toxicology Program
OEL – Occupational Exposure Limits
PBT – Persistent, Bioaccumulative and Toxic
PEL – Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT – Self Accelerating Decomposition Temperature
SDS – Safety Data Sheet
STEL – Short Term Exposure Limit
TA-Luft – Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand
TLM – Median Tolerance Limit
TLV – Threshold Limit Value
TPRD – Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 – Technische Regel für Gefahrstoffe 510 – Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe – N-Nitrosamine
TRGS 900 – Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 – Technische Regel für Gefahrstoffe 903 – Biologische Grenzwerte
TSCA – Toxic Substances Control Act
TWA – Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC – Valor Límite Ambiental Exposición de Corta Duración
VLA-ED – Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB – Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK – Wassergefährdungsklasse

Nusil EU GHS SDS

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SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.



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