R-3975

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Revision date: 02/06/2016 | Date of issue: 04/04/2014 | Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product Name : R-3975

Synonyms : RTV Fluorosilicone Dispersion

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

Use of the substance/mixture : For coating, sealing and bonding applications requiring solvent and/or fuel resistance. 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]

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Danger

Hazardous Ingreadients : tert-Butyl acetate .Silanetriol, ethyl-, triacetate

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P264 - Wash hands, forearms and exposed areas thoroughly after handling
P280 - Wear protective clothing, protective gloves, eye protection, face shield
P302+P352 - IF ON SKIN: Wash with plenty of water
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321 - Specific treatment (see Section 4 on this SDS)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use appropriate media to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

EUH-statements : EUH014 - Reacts violently with water

2.3. Other Hazards

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tert-Butyl acetate	(CAS No) 540-88-5 (EC no) 208-760-7 (EC index no) 607-026-00-7	60 - 65	Flam. Liq. 2, H225
Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl, hydroxy-terminated	(CAS No) 68607-77-2	10 - 15	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	< 2	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 if possible).

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact	: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries	: Causes serious eye irritation. Causes skin irritation.
Symptoms/injuries after inhalation	: May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms	: None known.

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

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical, carbon dioxide, water spray, foam, fog.
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	: Highly flammable liquid and vapour. Vapours may travel to source of ignition and flash back.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Reactivity	: Reacts violently with strong oxidisers. Increased risk of fire or explosion.

5.3. Advice for firefighters

Precautionary measures fire	: Exercise caution when fighting any chemical fire. Do not breathe fumes from fires or vapours from decomposition.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours. Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Use only non-sparking tools. Avoid all eyes and skin contact and do not breathe vapour and mist.

6.1.1.For non-emergency personnel

Protective equipment	: Use appropriate personal protection equipment (PPE).
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2.For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material 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. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : When heated, material emits irritating fumes. When mixed with air and exposed to an ignition source, flammable vapours can burn in the open or explode in confined spaces. Being heavier than air, vapours may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

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 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. Keep away from ignition sources (including static discharges). Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

tert-Butyl acetate (540-88-5)		
Austria	MAK (mg/m³)	96 mg/m³
Austria	MAK (ppm)	20 ppm
Austria	MAK Short time value (mg/m³)	96 mg/m³
Austria	MAK Short time value (ppm)	20 ppm
Austria	OEL - Ceilings (mg/m³)	96 mg/m³
Austria	OEL - Ceilings (ppm)	20 ppm
Belgium	Limit value (mg/m³)	964 mg/m³
Belgium	Limit value (ppm)	200 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	966 mg/m³

tert-Butyl acetate (540-88-5)		
Croatia	GVI (granična vrijednost izloženosti) (ppm)	200 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	1210 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	250 ppm
France	VME (mg/m³)	950 mg/m³
France	VME (ppm)	200 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	200 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	42 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Greece	OEL TWA (mg/m³)	950 mg/m³
Greece	OEL TWA (ppm)	200 ppm
Greece	OEL STEL (mg/m³)	1190 mg/m³
Greece	OEL STEL (ppm)	250 ppm
USA ACGIH	ACGIH TWA (ppm)	200 ppm
Latvia	OEL TWA (mg/m³)	200 mg/m³
Spain	VLA-ED (mg/m³)	966 mg/m³
Spain	VLA-ED (ppm)	200 ppm
Switzerland	VLE (mg/m³)	480 mg/m³
Switzerland	VLE (ppm)	100 ppm
Switzerland	VME (mg/m³)	240 mg/m³
Switzerland	VME (ppm)	50 ppm
United Kingdom	WEL TWA (mg/m³)	966 mg/m³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m³)	1210 mg/m³
United Kingdom	WEL STEL (ppm)	250 ppm
Czech Republic	Expoziční limity (PEL) (mg/m³)	950 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	710 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	150 ppm
Finland	HTP-arvo (8h) (mg/m³)	720 mg/m³
Finland	HTP-arvo (8h) (ppm)	150 ppm
Finland	HTP-arvo (15 min)	960 mg/m³
Finland	HTP-arvo (15 min) (ppm)	200 ppm
Ireland	OEL (8 hours ref) (mg/m³)	950 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (mg/m3)	1190 mg/m³
Ireland	OEL (15 min ref) (ppm)	250 ppm
Poland	NDS (mg/m³)	900 mg/m³
Poland	NDSCh (mg/m³)	900 mg/m³
Slovakia	NPHV (priemerná) (mg/m³)	96 mg/m³

tert-Butyl acetate (540-88-5)		
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	384 mg/m³
Slovenia	OEL TWA (mg/m³)	96 mg/m³
Slovenia	OEL TWA (ppm)	20 ppm
Slovenia	OEL STEL (mg/m³)	96 mg/m³
Slovenia	OEL STEL (ppm)	20 ppm
Sweden	nivågränsvärde (NVG) (mg/m³)	500 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	100 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	700 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	150 ppm
Portugal	OEL TWA (ppm)	200 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Proper grounding procedures to avoid static electricity should be followed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment : Avoid all unnecessary exposure. Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for protective clothing : Wear fire/flame resistant/retardant clothing.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Chemical safety goggles.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental exposure controls : Do not allow the product to be released into the environment.

Consumer exposure controls : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Translucent

Odour : Solvent

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : 2,8 (Butyl Acetate = 1)

Melting point : No data available

Freezing point : No data available

Boiling point : 98 °C (208,4 °F)

Flash point : 4,4 °C (39,92 °F)

Auto-ignition temperature : 517,8 °C (964,04 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : 41,5 mm Hg @ 25 °C (77 °F)

Relative vapour density at 20 °C	: No data available
Relative Density	: 1 (Water = 1)
Solubility	: No data available
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	: No data available

9.2. Other information

VOC content : 60 - 65 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with strong oxidisers. Increased risk of fire or explosion.

10.2. Chemical stability

Can form explosive mixture with air.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases. Metals. Nitrates.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO_2). Silicon oxides. Formaldehyde. Fluorine compounds. Hydrocarbons. Will decompose above 150 °C (>300 °F) releasing formaldehyde vapours. 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
tert-Butyl acetate (540-88-5)	
LD50 oral rat	4500 mg/kg
LD50 oral	3300 mg/kg
LD50 dermal rabbit	> 2000
LC50 inhalation rat (mg/l)	> 2230 mg/m³ (Exposure time: 4 h)
LC50 inhalation rat (ppm)	5157 ppm/4h
LC50 inhalation rat (Vapours - mg/l/4h)	13,3 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

tert-Butyl acetate (540-88-5)	
LC50 fish 1	296 - 362 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

tert-Butyl acetate (540-88-5)	
Log Pow	1,38

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

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 1123

14.2. UN proper shipping name

Proper Shipping Name (ADR) : BUTYL ACETATES

Transport document description (ADR) : UN 1123 BUTYL ACETATES (Contains Tert-butyl acetate), 3, II, (D/E)

14.3. Transport hazard class(es)

Class (ADR) : 3

Danger labels (ADR) : 3

14.4. Packing group

Packing group (ADR) : II

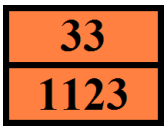
14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Orange plates :



Transport category (ADR) 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 1l
Excepted quantities (ADR) : E2
EAC code : 3YE

14.6.2. Transport by sea

EmS-No. (1) : F-E
MFAG-No : 129
EmS-No. (2) : S-D

14.6.3. Air transport

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
VOC content : 60 - 65 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Indication of changes:

Section	Section Header	Change	Date Changed
1	Identification of the substance/mixture and of the company/undertaking	Modified.	02/06/2016
2	Hazards identification	Modified. Removed DSD/DPD information.	02/06/2016
3	Composition/information on ingredients	Modified. Removed not classified components. Removed DSD/DPD information.	02/06/2016
9	Information on basic physical and chemical properties	Modified.	02/06/2016

14	Transport information	Modified.	02/06/2016
15.1	EU-Regulations	Modified.	02/06/2016

Revision date : 02/06/2016
Data sources : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, 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
H225	Highly flammable liquid and vapour
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

Nusil EU GHS SDS

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.

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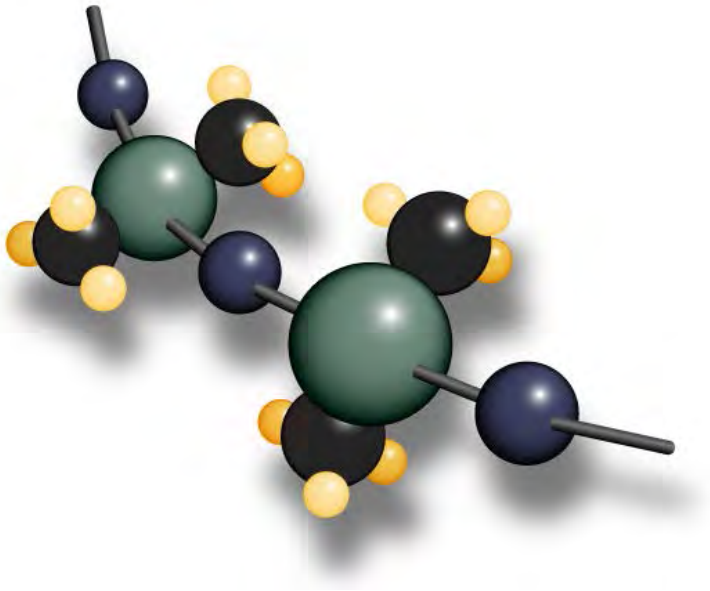

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