

Safety Data Sheet FMV-4042 Date of issue: 17/11/2014 Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-

DIMETHYLSILOXANE COPOLYMER

Product code : FMV-4042

Synonyms : FLUOROSILICONE; SILOXANE, DIMETHYL, TRIFLUOROPROPYLMETHYL,

DIMETHYLVINYL-TERMINATED; SILOXANES and SILICONES, DIMETHYL, METHYL 3,3,3-

TRIFLUOROPROPYL, VINYL TERMINATED

Chemical family : ORGANOSILOXANE

REACH authorisation exemptions : Exempted from REACH registration

#### 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 : Chemical intermediate

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

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USA

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## 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2 H319

Full text of 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) :



Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation.

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Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P264 - Wash hands thoroughly after handling.

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

contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Substance type : Polymer

Name : VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-

DIMETHYLSILOXANE COPOLYMER

CAS-No. : 68951-98-4 EC-No. : 614-836-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Vinyl terminated (35-45% trifluoropropylmethylsiloxane)- dimethylsiloxane copolymer	(CAS-No.) 68951-98-4 (EC-No.) 614-836-4	> 97	Not classified
Trifluoropropylmethylcyclotrisiloxane	(CAS-No.) 2374-14-3 (EC-No.) 219-154-7	< 3	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical

advice.

First-aid measures after skin contact : Wash with plenty of water/....

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/effects after inhalation : No information available.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

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

No additional information available

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

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#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

hemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid all eye and skin contact and do not breathe vapour and mist.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

#### 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

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or

shovel spills into appropriate container for disposal.

#### 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

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Wash contaminated clothing before reuse.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

## 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

## Appropriate engineering controls:

Provide local exhaust or general room ventilation.

#### Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

## Hand protection:

Neoprene or nitrile rubber gloves

#### Eye protection

Chemical goggles or safety glasses. Contact lenses should not be worn

## Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

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## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear liquid. Viscous. Molecular mass : 25000 - 35000 g/mol

Colour : Translucent.

Odour : No data available

Odour threshold : No data available

Refractive index : 1.388

pH : No data available Relative evaporation rate (butylacetate=1) : No data available

Melting point : < 0 °C

Freezing point : No data available
Boiling point : No data available

Flash point : > 150 °C

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 : 1.13 % Volatiles : < 3 %

Solubility : Insoluble in water.

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : 14000 - 18000 cSt

Viscosity, dynamic : No data available

Explosive properties : No data available

9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Oxidising properties

**Explosive limits** 

No additional information available

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Trifluoropropionaldehyde vapors may evolve from product used in open systems at temperatures above 150°C. These vapors are a potential health hazard and adequate ventilation must be provided.

No data available

No data available

## 10.4. Conditions to avoid

Heat. Open flame. Sparks.

## 10.5. Incompatible materials

Oxidizing agent.

LD50 oral rat

## 10.6. Hazardous decomposition products

Hydrogen fluoride. Organic acid vapors. Silicon dioxide.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

## Trifluoropropylmethylcyclotrisiloxane (2374-14-3)

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180 mg/kg

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Trifluoropropylmethylcyclotrisiloxane (2374-14-3)		
LD50 dermal rabbit	25400	
ATE CLP (oral)	180 mg/kg bodyweight	
ATE CLP (dermal)	25400 mg/kg bodyweight	

Skin corrosion/irritation : Not classified

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
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Symptoms/effects after inhalation : No information available.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

Reason for classification : Expert judgment

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

## 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. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Incinerate. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

#### 14.1. UN number

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

#### 14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

## 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable Proper Shipping Name (IMDG) : Not applicable

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Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

**ADR** 

Transport hazard class(es) (ADR) : Not applicable

**IMDG** 

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

**RID** 

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data 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

No REACH Annex XVII restrictions

VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER is not on the REACH Candidate

VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER is not on the REACH Annex XIV List

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VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

VINYL TERMINATED (35-45% TRIFLUOROPROPYLMETHYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

% Volatiles : < 3 %

#### 15.1.2. National regulations

#### Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve lijst van voor de voortplanting : The substance is not listed giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling

: The substance is not listed

: The substance is not listed

#### 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

#### Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

#### Other information

: Prepared by safety and environmental affairs.

#### Full text of H- and EUH-statements:

Tull toxt of 11 and Lott statem	one.
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

#### SDS EU (REACH Annex II) - Custom

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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