

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 09/09/2019 Date of issue: 09/02/2015

Version: 4.0

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

#### 1.1. Product Identifier

Product form Mixture
Product Name MED-4174

Synonyms Silicone Elastomer

#### 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 Europe 1198 Avenue Maurice Donat Le Natura Bt. 2 06250 Mougins France +33 4 92 96 93 31

ehs@nusil.com

www.nusil.com

#### 1.4. Emergency Telephone Number

Emergency Number : +(44)-870-8200418 +(353)-19014670

#### **SECTION 2: Hazards Identification**

#### 2.1. Classification of the Substance or Mixture

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

Not classified

#### 2.2. Label Elements

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

No labelling applicable

#### 2.3. Other Hazards

Contains vPvB substances >= 0.1% assessed in accordance with REACH Annex XIII

Other Hazards Not Contributing Exposure may aggravate pre-existing eye, skin, or respiratory to the Classification conditions.

## SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

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

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
Octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2 (EC-No.) 209-136-7 (EC Index-No.) 014-018-00-1	< 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Repr. 2, H361f Aquatic Chronic 4, H413
Decamethylcyclopentasiloxane	(CAS-No.) 541-02-6 (EC-No.) 208-764-9	< 1	Not classified
Dodecamethylcyclohexasiloxane	(CAS-No.) 540-97-6 (EC-No.) 208-762-8	< 1	Not classified

#### **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).

First-Aid Measures After When symptoms occur: go into open air and ventilate

Inhalation suspected area. Obtain medical attention if breathing difficulty

persists.

First-Aid Measures After Skin

Contact

Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation

develops or persists.

First-Aid Measures After Eye

Contact

Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Obtain medical attention if irritation develops or persists. Rinse mouth. Do NOT induce vomiting. Obtain medical

Ingestion attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects Not expected to present a significant hazard under anticipated

conditions of normal use.

Symptoms/Effects After

First-Aid Measures After

Inhalation

Prolonged exposure may cause irritation.

Symptoms/Effects After Skin

Contact

Prolonged exposure may cause skin irritation.

Symptoms/Effects After Eye

Contact

May cause slight irritation to eyes.

Symptoms/Effects After

Ingestion

Ingestion may cause adverse effects.

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, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam,

or dry chemical.

Safety Data Sheet

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

Unsuitable Extinguishing Media Do not use a heavy water stream. Use of heavy stream of water

may spread fire.

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 Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire Exercise caution when fighting any chemical fire.

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 Avoid prolonged contact with eyes, skin and clothing. Avoid

breathing (vapour, mist, 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.

Transfer spilled material to a suitable container for disposal.

Contact competent authorities after a spill.

#### 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

Precautions for Safe Handling Wash hands and other exposed areas with mild soap and

water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing.

Avoid breathing vapours, mist, spray.

Hygiene Measures Handle in accordance with good industrial hygiene and safety

procedures.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures Comply with applicable regulations.

09/09/2019 EN (English) 3/5

#### Safety Data Sheet

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

Keep container closed when not in use. Store in a dry, cool **Storage Conditions** 

place. Keep/Store away from direct sunlight, extremely high or

low temperatures and incompatible materials.

Strong acids, strong bases, strong oxidizers. Incompatible Materials

#### 7.3. Specific End Use(S)

For extrusion, transfer and compression molding and calendaring. For professional use only.

## **SECTION 8: Exposure Controls/Personal Protection**

#### 8.1. **Control Parameters**

No additional information available

#### 8.2. **Exposure Controls**

Suitable eye/body wash equipment should be available in the Appropriate Engineering Controls

vicinity of any potential exposure. Ensure adequate ventilation,

especially in confined areas. Ensure all national/local

regulations are observed.

Personal Protective Equipment Gloves. Protective clothing. Protective goggles.







Materials for Protective Clothing

Hand Protection **Eve Protection** 

Skin and Body Protection

Flammability (Solid, Gas)

Relative Vapour Density At 20 °C

Vapour Pressure

09/09/2019

Respiratory Protection

Chemically resistant materials and fabrics.

Wear protective gloves. Chemical safety gogales.

Wear suitable protective clothing.

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**

#### Information on Basic Physical and Chemical Properties

Physical State Gum

Colour **Translucent** Odour Odourless

Odour Threshold No data available Hq No data available **Evaporation Rate** No data available **Melting Point** No data available Freezing Point No data available No data available **Boiling Point** Flash Point >135 °C (275 °F) **Auto-Ignition Temperature** No data available **Decomposition Temperature** No data available

Not applicable

No data available

No data available

Version uploaded 28/12/2019

#### Safety Data Sheet

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

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 < 1 %

## **SECTION 10: Stability and Reactivity**

#### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

#### 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

Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. 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 (Based on available data, the classification criteria are not met)

Octamethylcyclotetrasiloxane (556-67-2)		
LD50 oral rat	1540 mg/kg	
LD50 dermal rabbit	794 µl/kg	
LC50 inhalation rat (mg/l)	36 g/m³ (Exposure time: 4 h)	
Decamethylcyclopentasiloxane (	541-02-6)	
LD50 Oral Rat	> 5000 mg/kg (Species: Sprague-Dawley)	
LD50 Dermal Rabbit	> 2000 mg/kg (Species: New Zealand White) No deaths	
	reported	
LC50 Inhalation Rat	8,67 mg/l/4h (Species: Fischer)	
Dodecamethylcyclohexasiloxane	e (540-97-6)	
LD50 Oral Rat	> 50 g/kg	
Skin Corrosion/Irritation	Not classified (Based on available data, the classification criteria are not met)	
Eye Damage/Irritation	Not classified (Based on available data, the classification criteria are not met)	

#### Safety Data Sheet

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

Respiratory or Skin Sensitization Not classified (Based on available data, the classification

criteria are not met)

Germ Cell Mutagenicity Not classified (Based on available data, the classification

criteria are not met)

Carcinogenicity Not classified (Based on available data, the classification

criteria are not met)

Reproductive Toxicity Not classified (Based on available data, the classification

criteria are not met)

Specific Target Organ Toxicity

Not classified (Based on available data, the classification

(Single Exposure)

criteria are not met)

Specific Target Organ Toxicity (Repeated

Not classified (Based on available data, the

Exposure)

classification criteria are not met)

Aspiration Hazard Not classified (Based on available data, the classification

criteria are not met)

## **SECTION 12: Ecological Information**

#### 12.1. Toxicity

Ecology - General Not classified.

Octamethylcyclotetrasiloxan	e (556-67-2)
LC50 fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

#### 12.2. Persistence and Degradability

MED-4174	
Persistence and Degradability	Not established.

#### 12.3. Bioaccumulative Potential

MED-4174	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in Soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

Octamethylcyclotetrasiloxane (556-67-2)	
This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII	

Decamethylcyclopentasiloxane (541-02-6)

This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII

Dodecamethylcyclohexasiloxane (540-97-6)

This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other Adverse Effects

Other Information Avoid release to the environment.

## **SECTION 13: Disposal Considerations**

#### 13.1. Waste Treatment Methods

Product/Packaging Disposal

Dispose of contents/container in accordance with local,

Recommendations

regional, national, and international regulations.

Ecology - Waste Materials

Avoid release to the environment.

09/09/2019 EN (English) 6/9

## **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

4.1. UN Number
ot regulated for transport
4.2. UN Proper Shipping Name
ot regulated for transport
4.3. Transport Hazard Class(Es)
ot regulated for transport
4.4. Packing Group
ot regulated for transport
4.5. Environmental Hazards
ot regulated for transport

#### 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 a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit:

Octamethylcyclotetrasiloxane (D4) (EC 209-136-7, CAS 556-67-2)

Decamethylcyclopentasiloxane (D5) (EC 208-764-9, CAS 541-02-6),

Dodecamethylcyclohexasiloxane (D6) (EC 208-762-8, CAS 540-97-6)

Contains no REACH Annex XIV 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
1	Identification of the Substance/mixture and of the	Modified	09/09/2019
	Company/Undertaking		
2	Hazards identification	Modified	09/09/2019
3	Composition/information on ingredients	Modified	09/09/2019
3	Composition/information on ingredients	Modified	09/09/2019
11	Toxicological information	Modified	09/09/2019

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

		15	Reaulatory information	Modified	09/09/2019
--	--	----	------------------------	----------	------------

Date of Preparation or Latest

Revision

09/09/2019

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 According to Regulation (EC) No. 1907/2006 (REACH) with its

amendment Regulation (EU) 2015/830

#### 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

 $\mbox{CLP}$  – Classification, Labeling and Packaging Regulation (EC) No 1272/2008  $\mbox{COD}$  – 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

FU - Furopean 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

MAK - Maximum Workplace Concentration/Maximum Permissible Concentration

MARPOL - International Convention for the Prevention of Pollution

NDS - Najwyzsze Dopuszczalne Stezenie

NDSCh - Naiwyzsze Dopuszczalne Stezenie Chwilowe

NDSP - Najwyzsze 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

 ${\rm RID}$  – 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 Movenne Exposition

vPvB - Very Persistent and Very Bioaccumulative

WEL - Workplace Exposure Limit WGK - Wassergefährdungsklasse

Nusil FU GHS SDS

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLYDISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR. SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND,

09/09/2019

Safety Data Sheet

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

INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.



# Silicone Sales & Services UK - Ireland - Benelux

© 2019 - Polymer Systems Technology Limited™ Unit 2. Network 4. Cressex Business Park, Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: https://www.silicone-polymers.com

email: sales@silicone-polymers.co.uk

