Expand the viewer bookmarks in the sidebar, or use the hyperlinks to jump to the section required.

MED-460\_@250cP

MED-460\_@350cP

MED-460\_@1000cP

MED-460\_12500cP

Contact Us



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 06/08/2019 Date of issue: 18/04/2013

Version: 3.0

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

#### 1.1. Product identifier

Product Form Substance

Product Name MED-460 @ 250 cP

CAS No 115361-68-7 Synonyms Silicone Fluid

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

1.2.1. Relevant identified uses

Industrial/Professional use spec 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 : +(44)-870-8200418 number +(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

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

No labellina applicable

#### 2.3. Other Hazards

Other hazards not contributing None under normal conditions.

to the classification

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

#### 3.1. Substance

06/08/2019 EN (English) 1/8

Safety Data Sheet

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]
Siloxanes and Silicones, di-Me, Me 3,3,3-trifluoropropyl	(CAS No) 115361-68-7	100	Not classified

Full text of H-statements: see section 16

#### **SECTION 4: 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

suspected area. Obtain medical attention if breathing

difficulty persists.

First-aid measures after skin Remove contaminated clothing. Drench affected area with

contact water for at least 15 minutes. Obtain medical attention if

irritation develops or persists.

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

inhalation

Rinse mouth. Do NOT induce vomiting. Obtain medical

attention.

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

Symptoms/injuries Not expected to present a significant hazard under

anticipated conditions of normal use. Prolonged exposure may cause irritation.

Symptoms/injuries after

inhalation

Troiding or exposero may eads a amanon.

Symptoms/injuries after skin

contact

Prolonged exposure may cause skin irritation.

Symptoms/injuries after eye

contact

May cause slight irritation to eyes.

Symptoms/injuries after Ingestion may cause adverse effects.

ingestion

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, alcohol-resistant 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.

06/08/2019 EN (English) 2/8

Safety Data Sheet

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

#### 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.

Firefighting instructions

Use water spray or fog for cooling exposed containers.

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 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. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and 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.

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.

06/08/2019 EN (English) 3/8

Safety Data Sheet

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

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

place. 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)

Cosmetics, personal care products. For professional use only.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

8.2. Exposure controls

clothing

Appropriate engineering Ensure adequate ventilation, especially in confined areas.

controls Ensure all national/local regulations are observed.

Personal protective Gloves. Protective clothing. Protective goggles.

Materials for protective Chemically resistant materials and fabrics.

Hand protection Wear protective gloves.

Eye protection Chemical safety goggles.

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 properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless

Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate : No data available

(butylacetate=1)

Melting point : No data available Freezing point : No data available Boiling point : No data available : > 135 °C (> 275 °F) Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available

06/08/2019 EN (English) 4/8

#### Safety Data Sheet

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

: >1 (Water = 1)Relative Density : No data available Solubility 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

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Not classified

Not classified

Not classified

Not classified

Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard Not classified

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general Not classified.

06/08/2019 EN (English) 5/8

Safety Data Sheet

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

#### 12.2. Persistence and degradability

Siloxanes and Silicones, di-Me, I	Me 3,3,3-trifluoropropyl (115361-68-7)
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Siloxanes and Silicones, di-Me, M	Me 3,3,3-trifluoropropyl (115361-68-7)
Bioaccumulative potential	Not established.

#### 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 Dispose of contents/container in accordance with local,

recommendations regional, national, and international regulations.

## **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

In accordance with ADR / RID / IMDG / IATA / ADN							
ADR	IMDG	IATA	ADN	RID			
14.1. UN number							
Not regulated for tr	Not regulated for transport						
14.2. UN proper sh	nipping name						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport ha	zard class(es)						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.4. Packing group							
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.5. Environmental hazards							
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the			
environment : No	environment : No	environment : No	environment : No	environment : No			
	Marine pollutant :						
	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

06/08/2019 EN (English) 6/8

**VOC** content

## **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

#### 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	Modified	06/08/2019
	of the company/undertaking		

Date of Preparation or Latest 06/08/2019

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.

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

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

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

MARPOL - International Convention for the Prevention of Pollution

NDS - Naiwyzsze 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

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 -

06/08/2019 EN (English) 7/8

#### Safety Data Sheet

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

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

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

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

06/08/2019 EN (English) 8/8



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 06/08/2019 Date of issue: 18/04/2013

Version: 3.0

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

#### 1.1. Product identifier

Product Form Substance

Product Name MED-460 @ 350 cP

CAS No 115361-68-7 Synonyms Silicone Fluid

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

1.2.1.Relevant identified uses

Industrial/Professional use spec 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 : +(44)-870-8200418 number +(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

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

No labelling applicable

#### 2.3. Other Hazards

Other hazards not contributing None under normal conditions.

to the classification

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

#### 3.1. Substance

06/08/2019 EN (English) 1/8

Safety Data Sheet

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]
Siloxanes and Silicones, di-Me, Me 3,3,3-trifluoropropyl	(CAS No) 115361-68-7	100	Not classified

Full text of H-statements: see section 16

#### **SECTION 4: 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 Remove contaminated clothing. Drench affected area with

contact water for at least 15 minutes. Obtain medical attention if

irritation develops or persists.

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 Rinse mouth. Do NOT induce vomiting. Obtain medical

ingestion attention.

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

Symptoms/injuries Not expected to present a significant hazard under

anticipated conditions of normal use. Prolonged exposure may cause irritation.

Symptoms/injuries after

inhalation

Troiding a expession may easse imanem.

Symptoms/injuries after skin

contact

Prolonged exposure may cause skin irritation.

Symptoms/injuries after eye

contact

May cause slight irritation to eyes.

Symptoms/injuries after Ingestion may cause adverse effects.

ingestion

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, alcohol-resistant 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.

06/08/2019 EN (English) 2/8

Safety Data Sheet

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

#### 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.

Firefighting instructions

Use water spray or fog for cooling exposed containers.

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 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. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and 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.

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.

06/08/2019 EN (English) 3/8

Safety Data Sheet

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

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

place. 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)

Cosmetics, personal care products. For professional use only.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

8.2. Exposure controls

clothing

Appropriate engineering Ensure adequate ventilation, especially in confined areas.

controls Ensure all national/local regulations are observed.

Personal protective Gloves. Protective clothing. Protective goggles.

Materials for protective Chemically resistant materials and fabrics.

Hand protection Wear protective gloves.

Eye protection Chemical safety goggles.

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 properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless

Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate : No data available

(butylacetate=1)

Melting point : No data available Freezing point : No data available Boiling point : No data available : > 135 °C (> 275 °F) Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available

06/08/2019 EN (English) 4/8

#### Safety Data Sheet

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

: >1 (Water = 1)Relative Density : No data available Solubility 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

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Not classified

Not classified

Not classified

Not classified

Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard Not classified

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general Not classified.

06/08/2019 EN (English) 5/8

Safety Data Sheet

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

#### 12.2. Persistence and degradability

Siloxanes and Silicones, di-Me,	Me 3,3,3-trifluoropropyl (115361-68-7)
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Siloxanes and Silicones, di-Me, I	Me 3,3,3-trifluoropropyl (115361-68-7)
Bioaccumulative potential	Not established.

#### 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 Dispose of contents/container in accordance with local,

recommendations regional, national, and international regulations.

## **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

In accordance with ADR / RID / IMDG / IATA / ADN							
ADR	IMDG	IATA	ADN	RID			
14.1. UN number							
Not regulated for tr	Not regulated for transport						
14.2. UN proper sh	nipping name						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport ha	zard class(es)						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.4. Packing group							
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.5. Environmental hazards							
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the			
environment : No	environment : No	environment : No	environment : No	environment : No			
	Marine pollutant :						
	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

06/08/2019 EN (English) 6/8

**VOC** content

## **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

## 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	Modified	06/08/2019
	of the company/undertaking		

Date of Preparation or Latest 06/08/2019

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 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

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

MARPOL - International Convention for the Prevention of Pollution

NDS - Najwyzsze Dopuszczalne Stezenie

NDSCh - Najwyzsze 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

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 -

06/08/2019 EN (English) 7/8

#### Safety Data Sheet

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

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

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

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

06/08/2019 EN (English) 8/8



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 06/08/2019 Date of issue: 18/04/2013

ision date: 06/08/2019 Date of issue: 18/04/2013 Version: 3.0

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

#### 1.1. Product identifier

Product Form Substance

Product Name MED-460 @ 1,000 cP

CAS No 115361-68-7 Synonyms Silicone Fluid

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec 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 : +(44)-870-8200418 number +(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

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

No labelling applicable

#### 2.3. Other Hazards

Other hazards not contributing None under normal conditions.

to the classification

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

#### 3.1. Substance

06/08/2019 EN (English) 1/8

Safety Data Sheet

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]
Siloxanes and Silicones, di-Me, Me 3,3,3-trifluoropropyl	(CAS No) 115361-68-7	100	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 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

suspected area. Obtain medical attention if breathing

difficulty persists.

First-aid measures after skin Remove contaminated clothing. Drench affected area with

contact water for at least 15 minutes. Obtain medical attention if

irritation develops or persists.

First-aid measures after eye Rinse cautiously with water for at least 15 minutes. Remove

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

Obtain medical attention.

First-aid measures after Rinse mouth. Do NOT induce vomiting. Obtain medical

ingestion attention.

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

Symptoms/injuries Not expected to present a significant hazard under

anticipated conditions of normal use. Prolonged exposure may cause irritation.

Symptoms/injuries after

inhalation

inhalation

Prolonged exposure may cause skin irritation.

contact

Symptoms/injuries after eye

Symptoms/injuries after skin

contact

May cause slight irritation to eyes.

Symptoms/injuries after Ingestion may cause adverse effects.

ingestion

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, alcohol-resistant 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.

06/08/2019 EN (English) 2/8

Safety Data Sheet

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

#### 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.

Firefighting instructions

Use water spray or fog for cooling exposed containers.

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 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. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and 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.

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.

06/08/2019 EN (English) 3/8

Safety Data Sheet

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

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

place. 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)

Cosmetics, personal care products. For professional use only.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

8.2. Exposure controls

clothing

Appropriate engineering Ensure adequate ventilation, especially in confined areas.

controls Ensure all national/local regulations are observed.

Personal protective Gloves. Protective clothing. Protective goggles.

Materials for protective Chemically resistant materials and fabrics.

Hand protection Wear protective gloves. Eye protection Chemical safety goggles.

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 properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless

Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate : No data available

(butylacetate=1)

Melting point : No data available Freezing point : No data available Boiling point : No data available : > 135 °C (> 275 °F) Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available

06/08/2019 EN (English) 4/8

#### Safety Data Sheet

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

: >1 (Water = 1)Relative Density : No data available Solubility 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

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Not classified

Not classified

Not classified

Not classified

Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard Not classified

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general Not classified.

06/08/2019 EN (English) 5/8

Safety Data Sheet

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

#### 12.2. Persistence and degradability

Siloxanes and Silicones, di-Me, I	Me 3,3,3-trifluoropropyl (115361-68-7)
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Siloxanes and Silicones, di-Me, M	Me 3,3,3-trifluoropropyl (115361-68-7)
Bioaccumulative potential	Not established.

#### 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 Dispose of contents/container in accordance with local,

recommendations regional, national, and international regulations.

## **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

In accordance with ADR / RID / IMDG / IATA / ADIN							
ADR	IMDG	IATA	ADN	RID			
14.1. UN number							
Not regulated for tr	Not regulated for transport						
14.2. UN proper sh	nipping name						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport ha	zard class(es)						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.4. Packing group							
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.5. Environment	14.5. Environmental hazards						
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the			
environment : No	environment : No	environment : No	environment : No	environment : No			
	Marine pollutant :						
	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

06/08/2019 EN (English) 6/8

## **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

#### 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	Modified	06/08/2019
	of the company/undertaking		

Date of Preparation or Latest 06/08/2019

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.

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

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

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

MARPOL - International Convention for the Prevention of Pollution

NDS - Naiwyzsze 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

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 -

06/08/2019 EN (English) 7/8

#### Safety Data Sheet

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

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

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

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

06/08/2019 EN (English) 8/8



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 06/08/2019 Date of issue: 18/04/2013

Version: 3.0

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

#### 1.1. Product identifier

Product Form Substance

Product Name MED-460 @ 12,500 cP

CAS No 115361-68-7 Synonyms Silicone Fluid

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

1.2.1.Relevant identified uses

Industrial/Professional use spec 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 : +(44)-870-8200418 number +(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

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

No labelling applicable

#### 2.3. Other Hazards

Other hazards not contributing None under normal conditions.

to the classification

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

#### 3.1. Substance

06/08/2019 EN (English) 1/8

Safety Data Sheet

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]
Siloxanes and Silicones, di-Me, Me 3,3,3-trifluoropropyl	(CAS No) 115361-68-7	100	Not classified

Full text of H-statements: see section 16

#### **SECTION 4: 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

suspected area. Obtain medical attention if breathing

difficulty persists.

First-aid measures after skin Remove contaminated clothing. Drench affected area with

contact water for at least 15 minutes. Obtain medical attention if

irritation develops or persists.

First-aid measures after eye Rinse of

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 Rinse mouth. Do NOT induce vomiting. Obtain medical

ingestion attention.

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

Symptoms/injuries Not expected to present a significant hazard under

anticipated conditions of normal use. Prolonged exposure may cause irritation.

Symptoms/injuries after

inhalation

inhalation

Troiding ou expedient may ediese illianem.

Symptoms/injuries after skin

contact

Prolonged exposure may cause skin irritation.

Symptoms/injuries after eye

contact

May cause slight irritation to eyes.

Symptoms/injuries after Ingestion may cause adverse effects.

ingestion

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, alcohol-resistant 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.

06/08/2019 EN (English) 2/8

Safety Data Sheet

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

#### 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.

Firefighting instructions

Use water spray or fog for cooling exposed containers.

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 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. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and 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.

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.

06/08/2019 EN (English) 3/8

Safety Data Sheet

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

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

place. 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)

Cosmetics, personal care products. For professional use only.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering Ensure adequate ventilation, especially in confined areas.

controls Ensure all national/local regulations are observed.

Personal protective Gloves. Protective clothing. Protective goggles.

Materials for protective Chemically resistant materials and fabrics.

clothing
Hand protection
Wear protective gloves.
Eye protection
Chemical safety goggles.

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 properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid : Colourless

Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate : No data available

(butylacetate=1)

Melting point : No data available Freezing point : No data available Boiling point : No data available : > 135 °C (> 275 °F) Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available

06/08/2019 EN (English) 4/8

#### Safety Data Sheet

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

: >1 (Water = 1)Relative Density : No data available Solubility 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

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Not classified

Not classified

Not classified

Not classified

Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard Not classified

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general Not classified.

06/08/2019 EN (English) 5/8

Safety Data Sheet

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

#### 12.2. Persistence and degradability

Siloxanes and Silicones, di-Me, Me 3,3,3-trifluoropropyl (115361-68-7)		
Persistence and degradability	Not established.	

#### 12.3. Bioaccumulative potential

Siloxanes and Silicones, di-Me, M	Me 3,3,3-trifluoropropyl (115361-68-7)
Bioaccumulative potential	Not established.

## 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 Dispose of contents/container in accordance with local,

recommendations regional, national, and international regulations.

## **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

In accordance with ADR / RID / IMDG / IATA / ADIN							
ADR	IMDG	IATA	ADN	RID			
14.1. UN number							
Not regulated for tr	Not regulated for transport						
14.2. UN proper sh	nipping name						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport ha	zard class(es)						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.4. Packing group							
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			
14.5. Environmental hazards							
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the			
environment : No	environment : No	environment : No	environment : No	environment : No			
	Marine pollutant :						
	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

06/08/2019 EN (English) 6/8

## **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

#### 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	Modified	06/08/2019
	of the company/undertaking		

Date of Preparation or Latest 06/08/2019

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 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

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

MARPOL - International Convention for the Prevention of Pollution

NDS - Najwyzsze Dopuszczalne Stezenie

NDSCh - Najwyzsze 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

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 -

06/08/2019 EN (English) 7/8

#### Safety Data Sheet

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

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

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

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

06/08/2019 EN (English) 8/8



# Silicone Sales & Services UK - Ireland - Benelux

© 2022 - 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

