



# eni Ribes Silicone Fluid

Safety Data Sheet  
According to Regulation (EC) No. 453/2010

Revision date: 01/12/2014

Version: 1.0

:

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

### 1.1. Product identifier

Product form : Mixture  
Trade name : eni Ribes Silicone Fluid  
EC index no : N/A  
EC no : N/A  
CAS No : N/A  
REACH registration No : N/A  
Product code : 6804  
Formula : 0203-2015  
Product group : Trade product

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

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : Wide dispersive use  
Use of the substance/mixture : Protective for metals

----

Do not use the product for any purposes that have not been advised by the manufacturer. In that case, the user could be exposed to unpredictable risks.

#### 1.2.2. Uses advised against

No additional information available

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

ENI S.p.A.  
P.le E. Mattei 1 - 00144 ROMA Italy  
Tel (+39) 06 59821  
www.eni.com

Contact:  
Refining & Marketing and Chemicals  
Via Laurentina 449 00142 ROMA Italy  
Tel (+39) 06 59881 Fax (+39) 06 59885700

Competent person responsible for the Safety Data Sheet (Reg. EC nr. 1907/2006): SDSInfo@eni.com

### 1.4. Emergency telephone number

Emergency number : CNIT +39 0382 24444 (24h) (IT + EN)

Poison centre (UK):

National Poisons Information Service Edinburgh (24h)  
(+44) 844 892 0111  
0870 600 6266 (UK only)  
(Source: UN-WHO)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Aerosol 1 H222;H229

Full text of H-phrases: see section 16

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

Extremely flammable. High concentration of vapours may induce: headache, nausea, dizziness. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect.

### 2.2. Label elements

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

Hazard pictograms (CLP)

:



GHS02

CLP Signal word

: Danger

Hazard statements (CLP)

: H222 - Extremely flammable aerosol  
H229 - Pressurized container: may burst if heated

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P251 - Do not pierce or burn, even after use  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F  
P211 - Do not spray on an open flame or other ignition source

#### Other:

General advice

: (Not applicable - Classified as dangerous according to (EC) No 1272/2008)

### 2.3. Other hazards (not relevant for classification)

Physical/chemical

: Vapours may form flammable and explosive mixture with air, This material can accumulate static charge by flow or agitation and can be ignited by static discharge.

Health

: If the content is accidentally released, it may be injected under the skin, even without external damage. In such a case, the victim should be brought to a hospital as soon as possible, to get specialized medical treatment., In case of accidental losses, the liquid product will evaporate quickly absorbing heat, and contact may cause cold burns.

Environment

: None.

Contaminants

: None.

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixture

Composition/information on ingredients : Mixture of hydrocarbons and solvents  
Additives  
Propellant gas

Hazardous ingredients and/or with :  
relevant occupational exposure limits

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Butane (Propellant gas)	(CAS No) 106-97-8 (EC no) 265-150-3 (REACH-no) 01-2119486557-22	90 - 95	F+; R12

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Butane (Propellant gas)	(CAS No) 106-97-8 (EC no) 265-150-3 (REACH-no) 01-2119486557-22	90 - 95	Flam. Gas 1, H220 Compressed gas, H280

Full text of R-, H- and EUH-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : None specific.
- First-aid measures after inhalation : If the casualty is breathing: Remove to fresh air, keep the casualty warm and at rest. Place in the recovery position. Administer oxygen if necessary. If casualty is unconscious and not breathing: ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice.
- First-aid measures after skin contact : Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice. If there are signs of frostbite, (blanching or redness of skin or burning or tingling sensation), do not rub, massage or compress the affected area. Obtain medical advice from a specialist.
- First-aid measures after eye contact : Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. Remove contact lenses, if present and easy to do so. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

First-aid measures after ingestion : Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is unconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs. Do not give anything by mouth to an unconscious person.

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

Symptoms / injuries (general indications) : Prolonged or repeated skin contact may cause a slight transient irritation.

Symptoms/injuries after inhalation : Overexposure to vapours (e.g. through prolonged use in confined, insufficiently ventilated spaces) may cause irritation to airways, nausea and dizziness.

Symptoms/injuries after skin contact : Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with the liquid the may cause cold burns/frostbite.

Symptoms/injuries after eye contact : Contact with eyes may cause a light transient irritation.

Symptoms/injuries after ingestion : Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.

Symptoms/injuries upon intravenous administration : No information available.

Chronic symptoms : None to be reported, according to our present knowledge.

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

No additional information available

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).

Unsuitable extinguishing media : Do not use water jets. They could cause splattering, and spread the fire.

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

Fire hazard : Heating may cause a fire or explosion. The vapours are flammable and may form explosive mixtures with air.

Explosion hazard : Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing risk of burns and injuries.

Combustion products : Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NOx (harmful/toxic gases), Oxygenated compounds (aldehydes, etc.), SiOx

#### 5.3. Advice for firefighters

Firefighting instructions : Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.

Special protective equipment for firefighters : Personal protection equipment for firefighters (see also sect. 8). Self-contained breathing apparatus.

Other information : In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

## SECTION 6: Accidental release measures

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

General measures : Stop or contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material. Keep upwind.

#### 6.1.1. For non-emergency personnel

Protective equipment : See Section 8.

Emergency procedures : Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

#### 6.1.2. For emergency responders

Protective equipment : Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves (preferably gauntlets) providing adequate chemical resistance. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Antistatic non-skid safety shoes or boots, chemical resistant. Work helmet. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: a half or full-face respirator with filter(s) for organic vapours (AX), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.

Emergency procedures : Notify local authorities according to relevant regulations.

### 6.2. Environmental precautions

Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations.

### 6.3. Methods and material for containment and cleaning up

For containment : Soil. Contain spilled liquid with sand, earth or other suitable absorbents (non-flammable). Recover free liquid and waste materials in suitable waterproof and oil-resistant containers. Clean contaminated area. Dispose of according to local regulations. Large spillages may be cautiously covered with foam, if available, to limit fire risk. When inside buildings or confined spaces, ensure adequate ventilation. Water: In case of small spillages in closed waters (i.e. ports),. Confine the spillage. Remove from surface by skimming or suitable floating absorbents. Collect recovered product and other waste materials in suitable waterproof, oil resistant containers. Recover or dispose of according to local regulations. Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air/water temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

**6.4. Reference to other sections**

See Section 8.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

- Precautions for safe handling : Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Do not use electrical equipment (mobile phones etc.) not approved for use, according to the risk rating of the area. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. Before commencing any operation in a confined area (e.g. tunnels), check the atmosphere for oxygen content and flammability. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned.
- Handling temperature : ≤ 50 °C
- Hygiene measures : Avoid contact with skin. Use adequate personal protective equipment as needed. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Do not re-use clothes, if they are still contaminated.

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

- Storage conditions : Store in dry, well ventilated area. Do not smoke. Keep away from open flames, hot surfaces and sources of ignition. Vapours are heavier than air and spread above ground. Beware of accumulation in pits and confined spaces.
- Incompatible products : Keep away from: strong oxidants.
- Storage temperature : ≤ 50 °C
- Storage area : Storage area layout, electrical equipment and wiring must comply with the relevant safety regulations, according to the specific risk rating of the area. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.
- Packages and containers: : Keep containers tightly closed and properly labelled. Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.
- Packaging materials : Keep only in the original container.

**7.3. Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

eni Ribes Silicone Fluid (N/A)		
Austria	MAK (mg/m <sup>3</sup> )	< mg/m <sup>3</sup>
Butane (106-97-8)		
Austria	MAK (mg/m <sup>3</sup> )	1600 mg/m <sup>3</sup> (Butane)
Austria	MAK (ppm)	800 ppm (Butane)
Austria	MAK Short time value (mg/m <sup>3</sup> )	3800 (Butane)
Austria	MAK Short time value (ppm)	1600 ppm (Butane)
Belgium	Limit value (mg/m <sup>3</sup> )	1928 mg/m <sup>3</sup> (Butane)
Belgium	Limit value (ppm)	800 ppm (Butane)

# eni Ribes Silicone Fluid

Product code: 6804

## Safety Data Sheet

According to Regulation (EC) No. 453/2010

Revision date: 01/12/2014

Version: 1.0

Butane (106-97-8)		
France	VLE (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup> (Butane)
France	VLE (ppm)	800 ppm (Butane)
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	2400 mg/m <sup>3</sup> (Butane)
Germany	TRGS 900 Occupational exposure limit value (ppm)	1000 ppm (Butane)
Germany	TRGS 900 Limitation of exposure peaks (mg/m <sup>3</sup> )	9600 mg/m <sup>3</sup> (15 min) (Butane)
Germany	TRGS 900 Limitation of exposure peaks (ppm)	4000 ppm (15 min) (Butane)
Italy - Portugal - USA ACGIH	ACGIH TLV®-TWA (ppm)	1000 ppm (Alkanes, C1-C4)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup> (Butane)
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm (Butane)
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm LPG (Liquefied Petroleum Gas)
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	1800 mg/m <sup>3</sup> LPG (Liquefied Petroleum Gas)
Spain	VLA-ED (mg/m <sup>3</sup> )	1935 mg/m <sup>3</sup> (Butane)
Spain	VLA-ED (ppm)	800 ppm (Butane)
Switzerland	VLE (mg/m <sup>3</sup> )	7200 mg/m <sup>3</sup> (Propane)
Switzerland	VLE (ppm)	4000 ppm (Propane)
Switzerland	VME (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup> (Butane)
Switzerland	VME (ppm)	800 ppm (Butane)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1450 mg/m <sup>3</sup> (Butane)
United Kingdom	WEL TWA (ppm)	600 ppm (Butane)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	1810 mg/m <sup>3</sup> (Butane)
United Kingdom	WEL STEL (ppm)	750 ppm (Butane)
Denmark	Grænseværdi (langvarig) (mg/m <sup>3</sup> )	1200 mg/m <sup>3</sup> (Butane)
Denmark	Grænseværdi (langvarig) (ppm)	500 ppm (Butane)
Denmark	Grænseværdi (kortvarig) (mg/m <sup>3</sup> )	2400 (Butane)
Denmark	Grænseværdi (kortvarig) (ppm)	1000 ppm (Butane)
Hungary	CK-érték	2350 mg/m <sup>3</sup> (Butane)
Hungary	MK-érték	9400 mg/m <sup>3</sup> (Butane)
Poland	NDS (mg/m <sup>3</sup> )	1900 (Butane)
Poland	NDSch (mg/m <sup>3</sup> )	3000 mg/m <sup>3</sup> (Butane)

### Monitoring methods

: Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts., Refer to relevant legislation and in any case to the good practice of industrial hygiene.

Additional information

: Note: The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

## 8.2. Exposure controls

Appropriate engineering controls

: Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability.

Personal protective equipment (for industrial or professional use)

: Gas mask (for conditions of use, see: "Respiratory protection"). Face shield. Safety glasses. Protective clothing. Gloves. Safety shoes or boots.



Hand protection

: When there is a risk of contact with the skin, use hydrocarbon-resistant, felt-lined gloves. Materials that are presumably adequate: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard. Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing gloves, hands must be carefully washed and dried.

Eye protection

: When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.

Skin and body protection

: Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant.

Respiratory protection

: Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: if the product is handled without adequate containment means for the vapours: use full or half-face masks with filter for hydrocarbon vapours (AX). (EN 136/140/145). Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145).

Thermal hazard protection

: None in normal use conditions.

Environmental exposure controls

: Do not discharge the product into the environment. Prevent discharge of undissolved substance to or recover from onsite wastewater. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Consumer exposure controls

: Not applicable.



## 8.3. Hygiene measures

General protective and hygienic measures : Avoid contact with skin and eyes, Do not breathe vapours or mists., Do not clean hands with dirty or oil-soaked rags., Do not keep dirty rags in the overall pockets., Do not drink, eat or smoke with dirty hands., Wash hands with water and mild soap, do not use solvents or other irritant products which have a defatting effect on the skin., Do not re-use clothes, if they are still contaminated.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Colorless gas.
Molecular mass	: Not applicable for mixtures
Colour	: Colourless.
Odour	: Petroleum-like.
Odour threshold	: There are no data available on the preparation/mixture itself.
pH	: Not applicable.
Relative evaporation rate (butylacetate=1)	: not determined
Melting point	: $\leq 0$ °C
Freezing point	: No data available
Boiling point	: $\approx -40$ °C Propellant gas
Flash point	: $-80$ °C Propellant gas
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,965 g/cm <sup>3</sup> DIN 51757
Solubility	: Water: Immiscible and insoluble
Log Pow	: Not applicable for mixtures
Log Kow	: No data available
Viscosity, kinematic	: 4 mm <sup>2</sup> /s Liquid.
Viscosity, dynamic	: No data available

Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: 1 - 11 vol % Composition/information on ingredients

## 9.2. Other information

VOC content : 93,43 % (EU, CH)

*The above data are typical values and do not constitute a specification.*

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This mixture does not offer any further hazard for reactivity, except what is reported in the following paragraphs.

### 10.2. Chemical stability

Stable product, according to its intrinsic properties (in normal conditions of storage and handling).

### 10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling). Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard. A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance.

### 10.4. Conditions to avoid

Keep away from strong oxidizers. Keep away from open flames, hot surfaces and sources of ignition. Avoid the build-up of electrostatic charge.

### 10.5. Incompatible materials

Strong oxidants.

### 10.6. Hazardous decomposition products

None.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met) (according to composition)

eni Ribes Silicone Fluid (N/A)	
LD50 oral rat	≥ 2000 mg/kg bodyweight (Calculated data). This evaluation is based on the information provided by the suppliers.
LD50 dermal rabbit	≥ 2000 mg/kg bodyweight (Calculated data). This evaluation is based on the information provided by the suppliers.
LC50 inhalation rat (mg/l)	≥ 20 mg/l/4h (Calculated data). This evaluation is based on the information provided by the suppliers.
ATE (oral)	2000,000 mg/kg bodyweight
ATE (dermal)	2000,000 mg/kg bodyweight
ATE (vapours)	20,000 mg/l/4h

# eni Ribes Silicone Fluid

Product code: 6804

## Safety Data Sheet

According to Regulation (EC) No. 453/2010

Revision date: 01/12/2014

Version: 1.0

eni Ribes Silicone Fluid (N/A)	
ATE (dust,mist)	20,000 mg/l/4h
Additional information	High concentration of vapours may induce: headache, nausea, dizziness

Butane (106-97-8)	
LC50 inhalation rat (mg/l)	> 20 mg/l/4h
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. pH: Not applicable.
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) (according to composition) pH: Not applicable.
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met) (according to composition) This product does not contain any significant amounts of substances classified as sensitizers (in any case < 0.1 % wt)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met) (according to composition) This product does not contain any significant amounts of substances classified as mutagenic by the EU (in any case < 0.1 % wt)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met) (according to composition) None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others.
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met) (according to composition) This product does not contain any significant amounts of substances classified as Toxic for Reproduction by the EU (in any case < 0.1 % wt)
Specific target organ toxicity (single exposure)	: Not classified (according to composition) High concentration of vapours may induce: headache, nausea, dizziness
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met) (according to composition)
Aspiration hazard	: Not classified (This product is not classified for Aspiration hazard (H 304/R 65). It is sold in a sealed aerosol container)
Potential Adverse human health effects and symptoms	: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with eyes may cause temporary reddening and irritation. High concentration of vapours may induce: headache, nausea, dizziness.
Other information	: None.

**SECTION 12: Ecological information****12.1. Toxicity**

- Ecology - general : According to the components, and by comparison with other products of the same type and composition, it is expected that this product has a toxicity for aquatic organisms > 100 mg/l, and must not be regarded as dangerous to the environment. An uncontrolled release to the environment may produce a contamination of different environmental compartments (air, soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment.
- Ecology - air : According to the characteristics of the components, a fraction of the product will evaporate quickly, diffusing in the atmosphere: this phenomenon may promote the creation of photochemical smog.
- Ecology - water : This product is not soluble in water. It floats on water and forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment)

eni Ribes Silicone Fluid (N/A)	
LC50 fish 1	10 - 100 mg/l (Calculated data). This evaluation is based on the information provided by the suppliers.
EC50 Daphnia 1	10 - 100 mg/l (Calculated data). This evaluation is based on the information provided by the suppliers.
ErC50 (algae)	10 - 100 mg/l (Calculated data). This evaluation is based on the information provided by the suppliers.

**12.2. Persistence and degradability**

eni Ribes Silicone Fluid (N/A)	
Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.

**12.3. Bioaccumulative potential**

eni Ribes Silicone Fluid (N/A)	
Log Pow	Not applicable for mixtures

**12.4. Mobility in soil**

No additional information available

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

eni Ribes Silicone Fluid (N/A)	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII.	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.	
Results of PBT-vPvB assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)

## 12.6. Other adverse effects

- Other adverse effects : None.
- Other information : This product has no specific properties for inhibition of bacterial activity. In any case, wastewater containing this product should be treated in plants that are suited for the specific purpose.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Waste treatment methods : Dispose of empty containers and wastes safely. Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.
- Sewage disposal recommendations : Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Dispose of in a safe manner in accordance with local/national regulations.
- Waste disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): 16 05 04\* (gases in pressure containers (including halons) containing dangerous substances). 15 01 10\* (packaging containing residues of or contaminated by dangerous substances). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations.
- Additional information : Empty containers may contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.
- Ecology - waste materials : The product as it is does not contain halogenated substances.

## SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

UN-No : 1950

### 14.2. UN proper shipping name

Proper Shipping Name : AEROSOLS

Transport document description : UN 1950 AEROSOLS, 2.1, (D)

### 14.3. Transport hazard class(es)

Class (UN) : 2

Hazard labels (UN) : 2.1



### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

### 14.6.1. Overland transport

Transport regulations (ADR)	: Subject to the provisions
Transport regulations (RID)	: Subject to the provisions
Classification code	: 5F
Tunnel restriction code	: D
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E0

### 14.6.2. Transport by sea

Transport regulations (IMDG)	: Subject to the provisions
Transport regulations (ADNR)	: Subject to the provisions
Limited quantities (IMDG)	: 1000 mL
EmS-No. (1)	: F-D, S-U

### 14.6.3. Air transport

Transport regulations (IATA)	: Subject to the provisions
Instruction "cargo" (ICAO)	: 203 - 150 kg
Instruction "passenger" (ICAO)	: 203 - 75 kg
Instruction "passenger" - Limited quantities (ICAO)	: 30 kg G

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

Authorisations and/or restrictions on use (Annex XVII):

3.a. Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	eni Ribes Silicone Fluid
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	eni Ribes Silicone Fluid

No ingredients are included in the REACH Candidate list (> 0,1 % m/m).

Contains no REACH Annex XIV substances.

Relevant EU Legislation	: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (et sequens). Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace) Directive 98/24/EC (protection of the health and safety of workers from the risks related to chemical agents at work). Directives 96/82/CE, 2003/105/CE and 2012/18/CE (Control of major-accident hazards involving dangerous substances) Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds) Labelling according to directives 67/548/EEC and 1999/45/EC
VOC content	: 93,43 % (EU, CH)
EURAL code (EWC)	: 16 05 04*, 15 01 10*

## 15.1.2. National regulations

Maladies professionnelles (F)	: RG 36 - Affections provoquées par les huiles et graisses d'origine minérale ou de synthèse
Water hazard class (WGK) (D)	: 1 - slightly hazardous to water
WGK remark	: Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
Storage class (LGK) (D)	: LGK 2B - Pressurized gas packages (aerosol containers)
VbF class (D)	: A I - Liquids with a flashpoint below 21°C
Regional legislation	: National adoption of EU Directives concerning health and safety on the workplace. National laws on classification and labeling of dangerous substances/preparations (Adoption of Directive 67/548/CE and subsequent Adaptations to Technical Progress - ATP, and Directive 1999/45/CE). National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (96/82/CE - 2003/105/CE). (annex I, part 1). Relevant national laws on prevention of water pollution. Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC). National adoption of Directives 75/439/CEE - 87/101/CEE concerning disposal of used oils.

## 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Indication of changes	: First issue.
Data sources	: This Safety Data Sheet is based on the characteristics of the component(s), according to the information provided by the supplier(s).

Abbreviations and acronyms	: Complete text of the phrases H and R quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.  N/A = Not applicable. N/D = Not available ACGIH = American Conference of Governmental Industrial Hygienists API = American Petroleum Institute CSR = Chemical Safety Report DNEL = Derived No Effect Level DMEL = Derived Minimum Effect Level EC50 = Effective Concentration, 50% EL50 = Effective Loading, 50 % EPA = Environmental Protection Agency IC50 = Inhibition Concentration, 50% LC50 = Lethal Concentration, 50% LD50 = Lethal Dose, 50% LL50 = Lethal Loading, 50% LOAEL = Low Observed Adverse Effects Level NOEL = No Observed Effects Level NOAEL = No Observed Adverse Effects Level OECD = Organization for Economic Cooperation and Development PNEC = Predicted No-Effect Concentration PBT = Persistent, Bioaccumulative, Toxic STOT = Single Target Organ Toxicity (STOT) RE = (Single Target Organ Toxicity) Repeated exposure (STOT) SE = (Single Target Organ Toxicity) Single exposure TLV®TWA = Threshold Limit Value® – Time-Weighted Average TLV®STEL = Threshold Limit Value® – Short Term Exposure Limit UVCB = Substance of Unknown or Variable composition, Complex reaction products or Biological materials vPvB = very Persistent, very Bioaccumulative WAF = Water Accommodated Fraction.
Training advice	: Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.
Other information	: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. ----. Do not use the product for any purposes that have not been advised by the manufacturer. In that case, the user could be exposed to unpredictable risks.

Full text of R-, H- and EUH-phrases: these phrases are reported here for information only, and MAY NOT correspond to the classification of the product.:

Aerosol 1	Aerosol, Category 1
Compressed gas	Gases under pressure Compressed gas
Flam. Gas 1	Flammable gases, Category 1
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H229	Pressurized container: may burst if heated
H280	Contains gas under pressure; may explode if heated
R12	Extremely flammable
F+	Extremely flammable



# eni Ribes Silicone Fluid

## Safety Data Sheet

According to Regulation (EC) No. 453/2010

**Product code:** 6804

**Revision date:** 01/12/2014

**Version:** 1.0

---

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*