

# EU safety data sheet

**Trade name:** KRONES multicroma Silan 2401

**Current version :** 1.0.1, issued: 28.07.2020

**Replaced version:** 1.0.0, issued: 28.07.2020

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**KRONES multicroma Silan 2401**

Substance name                      hexamethyldisiloxane  
REACH registration no.              01-2119496108-31

**Identification numbers**

CAS no.                                      107-46-0  
EC no.                                        203-492-7

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

**Relevant identified uses of the substance or mixture**

Adhesion promoter

**Uses advised against**

No data available.

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

**Address**

KIC KRONES Internationale Cooperationsgesellschaft mbH  
Böhmerwaldstraße 5  
93073              Neutraubling

Telephone no.                      +49 9401 70-3020  
Fax no.                                      +49 9401 70-3696  
e-mail                                      kic@kic-krones.com

**Advice on Safety Data Sheet**

sdb\_info@umco.de

### 1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

In case of transport incidents and other emergencies:

+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Aquatic Acute 1; H400

Aquatic Chronic 2; H411

Flam. Liq. 2; H225

**Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3 and 4 of Annex I to CLP.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Product identifier**

107-46-0 (hexamethyldisiloxane)

**Hazard pictograms**

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GHS02



GHS09

## Signal word

Danger

## Hazard statement(s)

H225 Highly flammable liquid and vapour.  
H410 Very toxic to aquatic life with long lasting effects.

## Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P391 Collect spillage.

## 2.3 Other hazards

No data available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

#### Chemical characterization

Substance name hexamethyldisiloxane

#### Identification numbers

CAS no. 107-46-0  
EC no. 203-492-7

### 3.2 Mixtures

Not applicable. The product is not a mixture.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. Show MSDS to the attending physician.

#### After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

#### After skin contact

In case of contact with skin wash off with water. Consult a doctor if skin irritation persists.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

#### After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

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

No data available.

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

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

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Extinguishing powder; Sand; Alcohol-resistant foam; Carbon dioxide

## **Unsuitable extinguishing media**

High power water jet; Water spray jet

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

Formation of explosive mixtures with air is possible.

### **5.3 Advice for firefighters**

Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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

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

#### **For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

#### **For emergency responders**

Personal protective equipment (PPE) - see section 8.

### **6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

### **6.4 Reference to other sections**

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Advice on safe handling**

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

#### **General protective and hygiene measures**

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - refrain from smoking. Isolate from sources of heat, sparks and open flame. Take precautionary measures against static charges. No sparking tools should be used. Vapours can form an explosive mixture with air.

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

#### **Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place.

#### **Recommended storage temperature**

Value max. 40 °C

#### **Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

#### **Incompatible products**

Substances to be avoided, see section 10.

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

No data available.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### DNEL, DMEL and PNEC values

##### DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	hexamethyldisiloxane			107-46-0 203-492-7	
	dermal	Long term (chronic)	systemic	333	mg/kg/day
	dermal	Short term (acut)	systemic	333	mg/kg/day
	inhalative	Long term (chronic)	systemic	53.4	mg/m <sup>3</sup>
	inhalative	Short term (acut)	systemic	53.4	mg/m <sup>3</sup>

##### DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	hexamethyldisiloxane			107-46-0 203-492-7	
	oral	Long term (chronic)	systemic	0.27	mg/kg/day
	oral	Long term (chronic)	systemic	0.27	mg/kg/day
	dermal	Long term (chronic)	systemic	167	mg/kg/day
	dermal	Short term (acut)	systemic	167	mg/kg/day
	inhalative	Long term (chronic)	systemic	13.3	mg/m <sup>3</sup>
	inhalative	Short term (acut)	systemic	13.3	mg/m <sup>3</sup>

##### PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	hexamethyldisiloxane		107-46-0 203-492-7	
	water	fresh water	0.002	mg/L
	water	marine water	0.0002	mg/L
	water	Aqua intermittent	0.003	mg/L
	water	fresh water sediment	1.7	mg/kg dry weight
	water	marine water sediment	0.17	mg/kg dry weight
	soil	-	0.083	mg/kg dry weight
	sewage treatment plant	-	10	mg/L

### 8.2 Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

#### Personal protective equipment

##### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator ABEK

##### Eye / face protection

Safety glasses with side protection shield (EN 166)

##### Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk

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of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

**Other**

Chemical-resistant work clothes.

**Environmental exposure controls**

No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>		
liquid		
colourless		
<b>Odour</b>		
weak		
<b>Odour threshold</b>		
No data available		
<b>pH value</b>		
No data available		
<b>Boiling point / boiling range</b>		
Value	100	°C
Reference pressure	1013	hPa
<b>Melting point / melting range</b>		
Value	-68	°C
<b>Decomposition point / decomposition range</b>		
No data available		
<b>Flash point</b>		
Value	-6	°C
Method	DIN 51755	
<b>Ignition temperature</b>		
Value	340	°C
Method	DIN 51794	
<b>Auto-ignition temperature</b>		
No data available		
<b>Oxidising properties</b>		
No data available		
<b>Explosive properties</b>		
No data available		
<b>Flammability (solid, gas)</b>		
No data available		
<b>Lower flammability or explosive limits</b>		
Value	0.68	% vol
<b>Upper flammability or explosive limits</b>		
Value	26	% vol
<b>Vapour pressure</b>		
Value	175	hPa
Reference temperature	50	°C
Value	44	hPa

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Reference temperature	20 °C		
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
Value	appr. 0.76		
Reference temperature	25 °C		
Comments	Water=1		
<b>Density</b>			
Value	0.76 g/cm <sup>3</sup>		
Reference temperature	25 °C		
<b>Solubility in water</b>			
Value	< 0.001 g/l		
Reference temperature	20 °C		
Comments	essentially insoluble		
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
<b>No</b>	<b>Substance name</b>	<b>CAS no.</b>	<b>EC no.</b>
1	hexamethyldisiloxane	107-46-0	203-492-7
log Pow		5.06	
Reference temperature		20 °C	
Source	ECHA		
<b>Viscosity</b>			
Value	0.5 mPa*s		
Reference temperature	25 °C		
Type	dynamic		
Value	0.65 mm <sup>2</sup> /s		
Reference temperature	25 °C		
Type	kinematic		

## 9.2 Other information

<b>Other information</b>
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

### 10.4 Conditions to avoid

Keep away sources of ignition. Heat, naked flames and other ignition sources.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

None, if handled according to intended use.

## SECTION 11: Toxicological information

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## 11.1 Information on toxicological effects

Acute oral toxicity			
No data available			

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
LC50		15956	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Species	rabbit		
Method	CFR 191.12 Ch Title 21		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Route of exposure	Skin		
Species	Human		
Method	Patch-Test		
Source	ECHA		
Evaluation	non-sensitizing		

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			

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No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Method		OECD 476	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
<b>STOT - single exposure</b>			
No data available			
<b>STOT - repeated exposure</b>			
No data available			
<b>Aspiration hazard</b>			
No data available			

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>			
No data available			
<b>Toxicity to fish (chronic)</b>			
No data available			
<b>Toxicity to Daphnia (acute)</b>			
No data available			
<b>Toxicity to Daphnia (chronic)</b>			
No data available			
<b>Toxicity to algae (acute)</b>			
No data available			
<b>Toxicity to algae (chronic)</b>			
No data available			
<b>Bacteria toxicity</b>			
No data available			

### 12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
Type		BOD	
Value		2	%
Duration		28	day(s)
Method		OECD 301 C	
Source		ECHA	
Evaluation		not readily biodegradable	

### 12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
BCF		1670	
Method		OECD 305 C	
Source		ECHA	
Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	hexamethyldisiloxane	107-46-0	203-492-7
log Pow		5.06	
Reference temperature		20 °C	
Source		ECHA	



# EU safety data sheet

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## 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

No data available.

## 12.6 Other adverse effects

No data available.

## 12.7 Other information

### Other information

Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	hexamethyldisiloxane
Special Provision 640	640C
Tunnel restriction code	D/E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

### 14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Technical name	hexamethyldisiloxane
EmS	F-E, S-E
Label	3
Marine pollutant mark	Symbol "fish and tree"

### 14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Technical name	hexamethyldisiloxane
Label	3

### 14.4 Other information

No data available.

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## 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

## 14.6 Special precautions for user

No data available.

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

##### **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

##### **REACH candidate list of substances of very high concern (SVHC) for authorisation**

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

##### **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40
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##### **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is subject to Part I of Annex I, risk category:	E1, P5b
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If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.

##### **Other regulations**

Adhere to the national sanitary and occupational safety regulations when using this product.

### 15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

## SECTION 16: Other information

#### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

#### **Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

#### **Creation of the safety data sheet**

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

#### **Alterations/supplements:**

Alterations to the previous edition are marked in the left-hand margin.

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