

# Safety Data Sheet

## Sarkosyl® O

Revision date : 2016/03/08

Version: 5.0

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(30472141/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

## Sarkosyl® O

#### Recommended use of the chemical and restriction on use

Recommended use\*: lubricants; additives

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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

##### Company:

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Synonyms: Acylsarkosinate

### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

#### Classification of the product

Acute Tox.	4 (Inhalation - mist)	Acute toxicity
Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Aquatic Acute	1	Hazardous to the aquatic environment - acute

#### Label elements

Pictogram:

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Signal Word:  
Danger

### Hazard Statement:

H318	Causes serious eye damage.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.

### Precautionary Statements (Prevention):

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P273	Avoid release to the environment.
P261	Avoid breathing mist.
P260	Do not breathe mist or vapour.
P264	Wash with plenty of water and soap thoroughly after handling.

### Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P362	IF ON SKIN (or hair): Wash with plenty of soap and water.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

### Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

### According to Controlled Products Regulations (CPR) (SOR/88-66)

### Emergency overview

#### DANGER:

Harmful by inhalation.

Corrosive to eyes.

Irritating to skin.

The substance is photo-sensitizing.

Potential sensitizer.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation.

Eye wash fountains and safety showers must be easily accessible.

In case of skin contact avoid direct exposure to sunlight or other UV radiation since this would increase sensitisation of the skin.

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### 3. Composition / Information on Ingredients

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
110-25-8	>= 75.0 - 100.0%	N-oleoyl-sarcoside

#### According to Controlled Products Regulations (CPR) (SOR/88-66)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
110-25-8	>= 75.0 - 100.0%	N-oleoyl-sarcoside

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

Immediately remove contaminated clothing.

##### If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

##### If on skin:

Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. If irritation develops, seek medical attention.

##### If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

##### If swallowed:

Rinse mouth immediately with water. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting due to aspiration hazard. Seek medical attention.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

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

##### Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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### 5. Fire-Fighting Measures

#### Extinguishing media

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Suitable extinguishing media:  
water spray, dry powder, foam

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

### Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Breathing protection required.

### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).

Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

Place absorbed material in the same container as the spilled substance/product for disposal.

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## 7. Handling and Storage

### Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Avoid freezing.

Protect from temperatures below: -10 °C

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## 8. Exposure Controls/Personal Protection

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No occupational exposure limits known.

### **Personal protective equipment**

#### **Respiratory protection:**

Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release.

#### **Hand protection:**

Chemical resistant protective gloves

#### **Eye protection:**

Tightly fitting safety goggles (chemical goggles) and face shield.

#### **Body protection:**

Impermeable protective clothing

#### **General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	mild	
Odour threshold:	No applicable information available.	
Colour:	yellow to brownish	
pH value:	4 ( 10 g/l, 20 °C)	
Melting point:	<= -5 °C	
onset of boiling:	> 201 °C The substance / product decomposes therefore not determined.	
Sublimation point:	No applicable information available.	
Flash point:	225 °C Literature data.	
Flammability:	not readily ignited	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	not determined	
Vapour pressure:	< 0.1 hPa ( 20 °C)	
Density:	0.94 g/cm <sup>3</sup> ( 20 °C) 0.9317 g/cm <sup>3</sup> ( 55 °C)	
Partitioning coefficient n-octanol/water (log Pow):	6.83 ( 25 °C) The data refers to the undissociated form of the substance.	(calculated)
Self-ignition temperature:	not self-igniting	

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Viscosity, kinematic:	250 - 450 mm <sup>2</sup> /s ( 40 °C)
Solubility in water:	practically insoluble
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Formation of

flammable gases:

Remarks:

Forms no flammable gases in the  
presence of water.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

### Conditions to avoid

Avoid open flames.

### Incompatible materials

strong oxidizing agents, strong bases, strong acids

### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products known.

## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### Primary routes of entry

Skin

Inhalation.

Eyes

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### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Of moderate toxicity after short-term inhalation.

#### Oral

Type of value: LD50

Species: rat (male/female)

Value: 5,000 mg/kg (similar to OECD guideline 401)

#### Inhalation

Type of value: LC50

Species: rat (male/female)

Value: 1.37 mg/l (BASF-Test)

Exposure time: 4 h

An aerosol was tested.

#### Dermal

No data available.

#### Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

#### Irritation / corrosion

Assessment of irritating effects: May cause severe damage to the eyes. Skin contact causes irritation.

#### Skin

Species: rabbit

Result: Irritant.

Method: OECD Guideline 404

#### Eye

Species: rabbit

Result: Risk of serious damage to eyes.

Method: BASF-Test

#### Sensitization

Assessment of sensitization: The substance may be photo-sensitizing. Animal studies do not fully exclude a skin sensitizing potential.

Guinea pig maximization test

Species: guinea pig

Result: Non-sensitizing.

Method: similar to OECD guideline 406

photo-allergy test

Species: guinea pig

Result: sensitizing

Method: other

Guinea pig maximization test

Species: guinea pig

Result: Potential sensitizer.

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Method: OECD Guideline 406

### Aspiration Hazard

No aspiration hazard expected.

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data: rat (Wistar) (male/female) oral feed 2 years 0.2%, 1%, 2%

NOAEL: > 1,000 mg/kg

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.

The substance was not genotoxic in mammalian cell culture.

Genetic toxicity in vitro: OECD Guideline 471 Ames-test Salmonella typhimurium:with and without metabolic activation negative

Ames-test Salmonella typhimurium:with and without metabolic activation negative

OECD Guideline 476 Mammalian cell gene mutation assay V79 cells:with and without metabolic activation negative

OECD Guideline 473 Chromosomal Aberration Test human lymphocytes:with and without metabolic activation negative

### Carcinogenicity

Assessment of carcinogenicity: No data available concerning carcinogenic effects.

### Reproductive toxicity

Assessment of reproduction toxicity: The results were determined in a Screening test (OECD 421/422). The results of animal studies gave no indication of a fertility impairing effect.

### Reproduction

Experimental/calculated data: OECD Guideline 421 rat (Wistar) (male/female) gavage 62.5, 250, 1000 mg/kg

NOAEL F1: 250 mg/kg

### Teratogenicity

Assessment of teratogenicity: In animal studies the substance did not cause malformations. The results were determined in a Screening test (OECD 421/422).

## Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

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Very toxic (acute effect) to aquatic organisms. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

### Toxicity to fish

LC50 (96 h) 3.2 - 4.6 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)  
Nominal concentration.

### Aquatic invertebrates

EC50 (48 h) 0.53 mg/l, *Daphnia magna* (Directive 79/831/EEC, static)  
Nominal concentration.

### Aquatic plants

EC90 (72 h) > 20 mg/l, *Scenedesmus subspicatus*

EC50 (72 h) 5.1 mg/l (growth rate), *Scenedesmus subspicatus* (Directive 88/302/EEC, part C, p. 89, static)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

## **Microorganisms/Effect on activated sludge**

### Toxicity to microorganisms

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C aerobic  
activated sludge, domestic/EC20 (0.5 h): 50 mg/l

Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

## **Persistence and degradability**

### Assessment biodegradation and elimination (H<sub>2</sub>O)

Readily biodegradable (according to OECD criteria).

### Elimination information

85 % CO<sub>2</sub> formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge)

## **Bioaccumulative potential**

### Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

## **Mobility in soil**

### Assessment transport between environmental compartments

No data available.

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## **13. Disposal considerations**

### **Waste disposal of substance:**

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with local authority regulations.

### **Container disposal:**

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Empty containers or liners may retain product residues.

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### 14. Transport Information

#### Land transport

TDG

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains N-OLEOYL-SARCOSINE)

#### Sea transport

IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains N-OLEOYL-SARCOSINE)

#### Air transport

IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains N-OLEOYL-SARCOSINE)

#### Further information

This product may be classified as limited quantity in selected package sizes.

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical DSL, CA released / listed

#### According to Controlled Products Regulations (CPR) (SOR/88-66)

##### WHMIS

##### classification:

D1B: Materials Causing Immediate and Serious  
Toxic Effects - Toxic material

D2B: Materials Causing Other Toxic Effects - Toxic  
material



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**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

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### 16. Other Information

**SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2016/03/08

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