

**SECTION 1 Identification****1.1. Product identifier**

Product form : Substance
Trade name : SOFTIGEN® 701 ECO
Chemical name : Castor oil, ester with glycerol
CAS-No. : 68459-67-6

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details**Manufacturer/Supplier**

IOI Oleo GmbH
Arthur-Imhausen-Str. 92
Witten, D-58453
Germany
T +49 40 280031-0

Branch Office

Acidchem (USA) Inc.
201 West Passaic Street, Suite 100
Rochelle Park, NJ 07662
USA

Email competent person

MSDS@ioioleo.de

1.5. Emergency phone number

Emergency number : For Hazardous Materials [or Dangerous Goods] Incidents
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970 (collect calls accepted)
Poison control (USA) 1-800-222-1222

SECTION 2 Hazard Identification**2.1. Classification of the substance or mixture****GHS US classification**

Not classified

2.2. Label elements**GHS US labeling**

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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SECTION 3 Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	GHS US classification
Castor oil, ester with glycerol (Main constituent)	CAS-No.: 68459-67-6	-	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

No additional information available

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Strong water jet.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon monoxide. Carbon dioxide.
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Spill area may be slippery.
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For non-emergency personnel

Emergency procedures	: Ventilate spillage area.
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For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Other information	: Disposal must be done according to official regulations.

Information for safe handling, See section 7, Concerning personal protective equipment to use, see section 8, For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Information about storage in one common storage facility	: Keep away from food, drink and animal feeding stuffs.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
In case of repeated or prolonged contact wear gloves. ISO 374-1. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer
Eye protection:
ISO 16321-1
Skin and body protection:
Wear suitable protective clothing. EN 340. EN 13034
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. EN 143. Filter A (colour code: brown). Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
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Appearance	: Viscous.
Color	: light yellow
Odor	: No data available
Odor threshold	: Not applicable
pH	: No data available
Melting point	: 18 – 30 °C (OECD 102 method)
Freezing point	: No data available
Boiling point	: > 300 °C
Flash point	: 227 °C Test method EU A.9
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: ≈ 0.98 g/cm ³ (30 °C)
Solubility	: Water: Not miscible
Partition coefficient n-octanol/water (Log Pow)	: > 4.5 Quantitative structure-activity relationship (QSAR)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: ≈ 612 mm ² /s
Viscosity, dynamic	: ≈ 600 mPa·s (30°C)
Explosion limits	: No data available
Explosive properties	: Product is not explosive.
Oxidizing properties	: Non oxidizing material.
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

Other properties	: No additional information available.
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SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

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Castor oil, ester with glycerol (68459-67-6)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 403 method)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Castor oil, ester with glycerol (68459-67-6)	
Viscosity, kinematic	≈ 612 mm²/s

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - water	: Due to the consistency along with the low water solubility of the product a bioavailability is unlikely.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

Castor oil, ester with glycerol (68459-67-6)	
LC50 - Fish [1]	130 mg/l (96 h; Leuciscus idus (golden orfe); (OECD 203 method))
EC50 - Crustacea [1]	200 mg/l (48 h; Daphnia magna; (OECD 202 method))
ErC50 algae	86 mg/l (72 h; Desmodesmus subspicatus; (OECD 201 method))
NOEC chronic algae	20 mg/l (72 h; Desmodesmus subspicatus; (OECD 201 method))

12.2. Persistence and degradability

Castor oil, ester with glycerol (68459-67-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	69.8 – 84.4 % (28d; (OECD 301F method))

12.3. Bioaccumulative potential

Castor oil, ester with glycerol (68459-67-6)	
Partition coefficient n-octanol/water (Log Pow)	> 4.5 Quantitative structure-activity relationship (QSAR)

12.4. Mobility in soil

No additional information available

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12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

Other information : No other effects known.

SECTION 13 Disposal considerations

Waste treatment methods : Disposal must be done according to official regulations. Do not dispose of with domestic waste. Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Do not re-use empty containers without proper cleaning or reconditioning. Recycle or dispose of in compliance with current legislation.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not applicable

IMDG

Not applicable

IATA

Not applicable

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 5/26/2025
Issue date : 5/26/2025
Data sources : Information provided by the manufacturer. European Chemicals Agency, <http://echa.europa.eu/>.
Department issuing data specification sheet: : KFT Chemieservice GmbH
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D-64347 Griesheim

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Contact person : Dr. Jutta Kilschautzky
Other information : Version/s 1.00, 3.00 is/are not available in this language.

Abbreviations and acronyms

ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
	RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
CAS	Chemical Abstract Service
IATA	International Air Transport Association
IMDG	International Maritime Code for Dangerous Goods
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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer

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Abbreviations and acronyms	
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organization for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

NFPA health hazard

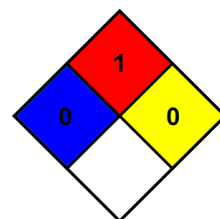
: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:

General revision.

KFT SDS US 06 - Version 24.2

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.