

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Trade name	: Surfactol™ 365
Chemical name	: Castor oil, ethoxylated
CAS-No.	: 61791-12-6
Synonyms	: Castor oil ethoxylate / Castor oil polyoxyethylene ether / Ethoxylated castor oil

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Surfactants
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1.3. Supplier

Aurorium
201 North Illinois Street
Suite 1800
Indianapolis, IN, 46204
USA
T +1-317-247-8141
SDS@aurorium.com - www.aurorium.com

1.4. Emergency telephone number

Emergency number	: Aurorium: +1-317-247-8141 CHEMTREC (USA): +1-800-424-9300 CHEMTREC (International): +1-703-527-3887
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Hazardous to the aquatic environment – Acute Hazard Category 2	H401	Toxic to aquatic life
Hazardous to the aquatic environment – Chronic Hazard Category 1	H410	Very toxic to aquatic life with long lasting effects
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H401 - Toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS US)	: P273 - Avoid release to the environment. P391 - Collect spillage. P501 - Dispose of contents or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name : Surfactol™ 365
CAS-No. : 61791-12-6

Name	Product identifier	%	GHS US classification
Castor oil, ethoxylated	CAS-No.: 61791-12-6	100	Aquatic Acute 2, H401 Aquatic Chronic 1, H410

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 first aid measures

First-aid measures after inhalation : If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Wash immediately with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause slight temporary irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Alcohol-resistant foam. Carbon dioxide. Dry powder.
Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Specific hazards arising from the chemical

Fire hazard : This product is not classified as flammable or combustible. Could burn but does not ignite readily.
Explosion hazard : Product is not explosive.
Hazardous decomposition products in case of fire : Toxic fumes may be released. (Carbon oxides (CO, CO₂)).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Ventilate spillage area. Take up liquid spill into absorbent material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Wash contaminated area with large amounts of water.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing must not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container closed when not in use.
Incompatible materials : Store away from strong oxidizers, strong bases, strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Castor oil, ethoxylated (61791-12-6)

USA - OSHA - Occupational Exposure Limits

Local name	Vegetable oil mist
OSHA PEL (TWA) [1]	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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Monitoring methods

Monitoring methods	Gravimetric analysis for total particulate and respirable fraction.
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8.2. Appropriate engineering controls

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves made of latex

Eye protection:

Safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Thermal hazard protection:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Pale yellow
Odor	: Mild odor
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: -7.76 °C (1013.25 hPa)
Boiling point	: 232.6 °C (96.96kPa)
Flash point	: 185 °C (1013.25 hPa)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0 Pa (25°C)
Relative vapor density at 20°C	: No data available
Particle size	: No data available in the literature
Relative density	: No data available
Density	: 0.979 g/cm ³ (20°C)
Solubility	: Water: 24.11 mg/l (25°C)
Partition coefficient n-octanol/water (Log Pow)	: 4.297 (25°C)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 252 mm ² /s
Viscosity, dynamic	: 247 mPa·s
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: Not oxidising.

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids, strong bases and oxidation agents.

10.6. Hazardous decomposition products

(Carbon oxides (CO, CO₂)).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Castor oil, ethoxylated (61791-12-6)	
LD50 oral	6500 mg/kg body weight mouse
LD50 dermal rat	> 2000 mg/kg body weight
ATE US (oral)	6500 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified. Not listed (IARC, NTP, US OSHA)

Reproductive toxicity : Not classified

Castor oil, ethoxylated (61791-12-6)	
NOAEL (animal/male, F0/P)	10000 mg/kg
NOAEL (animal/female, F0/P)	10000 mg/kg

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

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Castor oil, ethoxylated (61791-12-6)

NOAEL (oral,rat,90 days)	5000 mg/kg body weight
Aspiration hazard	: Not classified
Viscosity, kinematic	: 252 mm ² /s
Symptoms/effects	: May cause slight temporary irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Surfactol™ 365 (61791-12-6)

LC50 - Fish [1]	> 7.33 mg/l Danio rerio
EC50 - Crustacea [1]	> 25 mg/l Daphnia magna (Water flea)
NOEC (chronic)	0 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.001 ng/l
NOEC chronic crustacea	0.002 ng/l

12.2. Persistence and degradability

Surfactol™ 365 (61791-12-6)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

Surfactol™ 365 (61791-12-6)

Bioconcentration factor (BCF REACH)	3.162 L/kg
Partition coefficient n-octanol/water (Log Kow)	4.297 (25°C)
Bioaccumulative potential	Bioaccumulation is not expected to occur.

12.4. Mobility in soil

Surfactol™ 365 (61791-12-6)

Ecology - soil	Low mobility (soil).
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose of contents or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA No : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : For transport OUTSIDE the United States the proper shipping name is: UN3082, Environmentally Hazardous substance, liquid, n.o.s, (castor oil, ethoxylated), 9, PG III (Marine Pollutant).

DOT

No data available

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. US Federal regulations

Surfactol™ 365 (61791-12-6)

SARA Section 311/312 Hazard Classes	Section 2 GHS classification
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Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Castor oil, ethoxylated	61791-12-6	Present	Active	XU

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.

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15.2. International regulations

CANADA

Castor oil, ethoxylated (61791-12-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Castor oil, ethoxylated (61791-12-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US 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 Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 10/01/2023

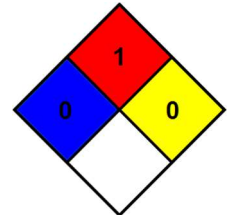
Full text of H-phrases

H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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.



Hazard Rating

Health : 0 Minimal Hazard - No significant risk to health

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Indication of changes:

All chapters have been modified since the previous version (new software).

Safety Data Sheet (SDS), USA

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