1. Identification

Product identifier used on the label

DL-alpha-Tocopherol

Recommended use of the chemical and restriction on use
Recommended use*: food additive(s); cosmetic ingredient

* 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: TOCOPHEROL

2. Hazards Identification

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

Classification of the product

Skin Sens. 1 Skin sensitization

Label elements

Pictogram:
Signal Word:
Warning

Hazard Statement:
H317 May cause an allergic skin reaction.

Precautionary Statements (Prevention):
P280 Wear protective gloves.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
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.

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.

3. Composition / Information on Ingredients

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

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10191-41-0</td>
<td>80.0 - 100.0%</td>
<td>D,L-alpha-Tocopherol</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

Description of first aid measures

General advice:
Immediately remove contaminated clothing. If adverse health effects develop seek medical attention.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.
If irritation develops, seek medical attention.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Consult a physician.

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.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, carbon dioxide, dry powder, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
carbon monoxide, carbon dioxide, harmful vapours
The substances/groups of substances mentioned can be released in case of fire. Burning produces harmful and toxic fumes. Evolution of fumes/fog.

Advice for fire-fighters
Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

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

Further information:
Cool endangered containers with water-spray. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid dust formation.

Use personal protective clothing. Information regarding personal protective measures see, section 8. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.
Environmental precautions
Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
For small amounts: Sweep/shovel up.
For large amounts: Sweep/shovel up.
For residues: Sweep/shovel up.
Place into suitable container for disposal. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling
Processing machines must be fitted with local exhaust ventilation. Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking.

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:
Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

Conditions for safe storage, including any incompatibilities
No applicable information available.

Suitable materials for containers: Stove-lacquer O 360, High density polyethylene (HDPE)

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep under inert gas. Protect from the effects of light. Protect from air. Protect against heat.

Storage stability:
Storage temperature: <= 25 °C
Once container is opened, content should be used as soon as possible.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:
No applicable information available.

Personal protective equipment

Respiratory protection:
Respiratory protection in case of vapour/aerosol release. Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection:
Wear chemical resistant protective gloves.

Eye protection:
Tightly fitting safety goggles (chemical goggles).
Body protection:
Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:
Avoid inhalation of vapours/mists. Wear protective clothing as necessary to prevent contact. Wash soiled clothing immediately. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and Chemical Properties

Form: viscous
Odour: mild, oily
Odour threshold: Not determined due to potential health hazard by inhalation.
Colour: light yellow
pH value: 5 - 9
Melting point: 2.5 - 3.5 °C (other)
Literature data.
Boiling point: (1,013 hPa) The substance / product decomposes. not applicable
210 °C (0.133 hPa)
Sublimation point:
Flash point: approx. 260 °C
Flammability: not flammable
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.
Vapour pressure: approx. 13 mbar
(approx. 155 °C)
(approx. 93 mbar
(approx. 200 °C)
Density: 0.95 g/cm³
(25 °C)
Literature data.
Relative density: 0.95
(25 °C)
Literature data.
Vapour density:
Partitioning coefficient n-octanol/water (log Pow): > 6 (calculated)
Self-ignition temperature: not self-igniting
Thermal decomposition: > 300 °C
Viscosity, dynamic: approx. 4,200 mPa.s (DIN 53019)
Viscosity, kinematic: No applicable information available.
Solubility in water: insoluble
Solubility (quantitative): No applicable information available.
Solubility (qualitative): soluble
solvent(s): organic solvents,
Molar mass: 430.71 g/mol
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:
Based on its structural properties the product is not classified as oxidizing.
Formation of flammable gases: Remarks: Forms no flammable gases in the presence of water.

Chemical stability
The product is stable under inert gas.

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

Conditions to avoid
Avoid contact with air.

Incompatible materials
oxidizing agents

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.
(DSC (DIN 51007))

Thermal decomposition:
> 300 °C

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.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.
Oral
Type of value: LD50
Species: rat (male)
Value: > 9,000 mg/kg (FHSA Guideline)

Inhalation
No applicable information available.

Dermal
Type of value: LD50
Species: rat
Value: > 3,000 mg/kg
Literature data. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment other acute effects
Assessment of STOT single:
Based on available Data, the classification criteria are not met.

Irritation / corrosion
Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Sensitization
Assessment of sensitization: Caused skin sensitization in animal studies.

Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: sensitizing
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.

Genetic toxicity
Assessment of mutagenicity: Most of the results from the available studies show no evidence of a mutagenic effect.
Carcinogenicity
Assessment of carcinogenicity: In long-term studies in rats in which the substance was given by feed, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.

Teratogenicity
Assessment of teratogenicity: Fetal toxicity was not observed in animal studies which were performed with methods that do not fulfill current guidelines. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.

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.

12. Ecological Information

Toxicity
Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish
LC50 (96 h) > 10,000 mg/l, Leuciscus idus (DIN 38412 Part 15, static)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates
EC50 (48 h) > 500 mg/l, Daphnia magna (Directive 79/831/EEC, static)
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to fish
No observed effect concentration (28 d) > 100 mg/l, Oncorhynchus mykiss (OECD Guideline 215, semistatic)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to aquatic invertebrates
Study scientifically not justified.

Assessment of terrestrial toxicity
Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
DIN 38412 Part 27 (draft) aquatic bacterium/EC10 (30 min): > 10,000 mg/l
The details of the toxic effect relate to the nominal concentration.
DIN EN ISO 8192 aerobic activated sludge, domestic/EC20 (30 min): > 900 mg/l

**Persistence and degradability**

Assessment biodegradation and elimination (H2O)
Not readily biodegradable (by OECD criteria). Biodegradable.

Elimination information

70 - 80 % BOD of the ThOD (63 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, domestic)

**Bioaccumulative potential**

Assessment bioaccumulation potential
Accumulation in organisms is not to be expected.

**Mobility in soil**

Assessment transport between environmental compartments
not determined

### 13. Disposal considerations

**Waste disposal of substance:**
Observe national and local legal requirements.

**Container disposal:**
Dispose of in accordance with national, state and local regulations.

### 14. Transport Information

**Land transport**
TDG

Not classified as a dangerous good under transport regulations

**Sea transport**
IMDG

Not classified as a dangerous good under transport regulations

**Air transport**
IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

**Federal Regulations**
Registration status:
Chemical	DSL, CA released / listed
Cosmetic	DSL, CA released / listed
Food	DSL, CA released / listed

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2016/03/21

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

END OF DATA SHEET