

## OCTAFLO EF Type I Conc\_24315010284\_Bulk

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Substance key: CLTFGOEF1

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Version : 4 - 1 / USA

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## SECTION 1. IDENTIFICATION

<b>Identification of the company:</b>	Clariant Corporation 4000 Monroe Road Charlotte, NC, 28205 Telephone No.: +1 704 331 7000
<b>Information of the substance/preparation:</b>	BU Industrial & Consumer Specialties Product Stewardship, +1-704-331-7710
<b>Emergency tel. number:</b>	+1 800-424-9300 CHEMTREC

<b>Trade name:</b>	<b>OCTAFLO EF Type I Conc_24315010284_Bulk</b>
<b>Material number:</b>	243150
<b>Synonyms:</b>	SAE/AMS 1424 TY I Deicing Fluid
<b>Primary product use:</b>	De-icing.
<b>Chemical family:</b>	Glycol

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Not a hazardous substance or mixture.

**GHS label elements**

Not a hazardous substance or mixture.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Substance name : Glycol

**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
Propylene Glycol	57-55-6	< 90

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## SECTION 4. FIRST AID MEASURES

If inhaled	: Move the victim to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical advice/ attention. Never give anything by mouth to an unconscious person.
In case of skin contact	: Wash thoroughly with soap and water for 15 minutes. If skin

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irritation occurs, seek medical attention.

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Get medical attention immediately if irritation develops and persists.
- If swallowed : IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- Most important symptoms and effects, both acute and delayed : The possible symptoms known are those derived from the labelling (see section 2).  
No additional symptoms are known.
- Notes to physician : None known.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : water  
Foam  
Dry powder  
Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
- Further information : Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.
- Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Contain spill. Small spills may be flushed to the sewer or absorbed on suitable absorbants. Larger spills should be collected as liquid or absorbed. Clean-up may be accomplished by flushing with water if appropriate or remove contaminated soils. place in appropriate containers.  
Contaminated surfaces will be extremely slippery.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Keep container closed.  
Avoid contact with skin and eyes.

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Technical measures/Precautions : Store in original container.  
Store in a cool, dry, well-ventilated area.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propylene Glycol	57-55-6	TWA	10 mg/m3	US WEEL

**Engineering measures** : Local ventilation recommended - mechanical ventilation may be used.

**Personal protective equipment**

Respiratory protection : not required under normal use

Hand protection

Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses or chemical splash goggles.

Skin and body protection : None known.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Liquid

Colour : orange

Odour : almost odourless

Odour Threshold : not determined

pH : 8.0

Freezing point : not determined

Boiling point : 255 °F

Flash point : > 255 °F

Evaporation rate : not determined

Flammability (solid, gas) : Not applicable

Upper explosion limit : not determined

Lower explosion limit : not determined

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Vapour pressure : < 13.3 hPa (25 °C)  
Method: calculated

Relative vapour density : not determined

Density : 1.044 g/cm<sup>3</sup>

Solubility(ies)  
Water solubility : completely soluble

Partition coefficient: n-  
octanol/water : not determined

Auto-ignition temperature : not determined

Decomposition temperature : no data available

Viscosity  
Viscosity, dynamic : not determined

Viscosity, kinematic : not determined

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable

Possibility of hazardous  
reactions : No dangerous reaction known under conditions of normal use.  
Stable

Conditions to avoid : None known.

Hazardous decomposition  
products : No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Eye contact

**Acute toxicity****Product:**

Acute oral toxicity : LD50 (Rat): Remarks: not tested.

Acute toxicity estimate: Method: Calculation method

**Components:****Propylene Glycol:**

Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg

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Method: Other

GLP: no

Acute inhalation toxicity : LC50 (Rabbit): > 317.042 mg/l  
Exposure time: 2 h  
Method: Other  
GLP: no

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Method: Other  
GLP: no

**Skin corrosion/irritation****Product:**

Remarks: The product has not been tested. The information is derived from the properties of the individual components.

**Components:****Propylene Glycol:**

Species: Rabbit  
Exposure time: 4 h  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: No information available.

**Serious eye damage/eye irritation****Product:**

Remarks: The product has not been tested. The information is derived from the properties of the individual components.

**Components:****Propylene Glycol:**

Species: rabbit eye  
Result: non-irritant  
Method: OECD Test Guideline 405  
GLP: No information available.

**Respiratory or skin sensitisation****Components:****Propylene Glycol:**

Test Type: Guinea pig maximization test  
Exposure routes: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: Does not cause skin sensitisation.  
GLP: No information available.

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Test Type: Mouse local lymphnode assay  
Exposure routes: Skin contact  
Species: Mouse  
Method: OECD Test Guideline 429  
Result: Does not cause skin sensitisation.  
GLP: No information available.

**Germ cell mutagenicity****Components:****Propylene Glycol:**

- Genotoxicity in vitro : Test Type: Ames test  
Species: Salmonella typhimurium  
Concentration: <= 10 mg/plate  
Metabolic activation: with  
Method: Ames test  
Result: negative  
GLP: No information available.
- : Test Type: Chromosome aberration test in vitro  
Species: Cultured peripheral human lymphocytes  
Concentration: 7,4 - 3810 µg/ml  
Metabolic activation: with and without  
Method: OECD Test Guideline 473  
Result: negative  
GLP: yes
- Genotoxicity in vivo : Test Type: Chromosome Aberration Test  
Species: Rat (male)  
Strain: Sprague-Dawley  
Cell type: Bone marrow  
Application Route: oral (gavage)  
Exposure time: 6 - 24 - 48 h  
Dose: 30 - 2500 - 5000 mg/kg  
Method: Other  
Result: negative  
GLP: no
- Test Type: Chromosome Aberration Test  
Species: Mouse (male)  
Cell type: Erythrocyten  
Application Route: Intraperitoneal injection  
Exposure time: 18 h  
Dose: 2500-5000-10000-15000 mg/kg  
Method: Other  
Result: negative  
GLP: No information available.
- Germ cell mutagenicity - Assessment : It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

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**Carcinogenicity****Components:****Propylene Glycol:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**IARC** Not listed

**OSHA** Not listed

**NTP** Not listed

**Reproductive toxicity****Components:****Propylene Glycol:**

Effects on fertility :  
Test Type: Two generation study  
Species: Mouse  
Sex: male and female  
Dose: 1820 - 4800 - 10100 mg/kg  
Exposure time: 126 d  
CD1  
Application Route: oral (gavage)  
NOAEL: 10,100 mg/kg,  
F1: 10,100 mg/kg,  
F2: 10,100 mg/kg,  
Method: Other  
GLP: No information available.

Effects on foetal development : Species: Mouse  
Application Route: oral (gavage)  
Exposure time: gestation day 6-15  
Dose: 52 - 520 - 10400 mg/kg  
Group: yes  
10,400 mg/kg  
52 mg/kg  
Number of exposures: daily  
Method: OECD Test Guideline 414  
GLP: yes

Reproductive toxicity - Assessment : No reproductive toxicity to be expected.  
No teratogenic effects to be expected.

**STOT - single exposure****Components:****Propylene Glycol:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

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**STOT - repeated exposure****Components:****Propylene Glycol:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Repeated dose toxicity****Components:****Propylene Glycol:**

Species: Rat, male and female  
NOAEL: 1,700 - 2,100 mg/kg  
Application Route: oral (feed)  
Exposure time: 2 a  
Number of exposures: daily  
Dose: 200-2100 mg/kg  
Group: yes  
Method: Other  
GLP: no

Species: Cat, male  
NOAEL: 443 mg/kg  
Application Route: oral (feed)  
Exposure time: 69 - 94 d  
Number of exposures: daily  
Dose: 80 - 4239 mg/kg  
Group: yes  
Method: Other  
GLP: no

Species: Rat, male and female  
NOAEL: 1 - 2.2 mg/l  
Application Route: Inhalation  
Exposure time: 90 d  
Number of exposures: 6 hours/day, 5 days/week  
Dose: 0,16 - 1,01 - 2,18 mg/l  
Group: yes  
Method: Other  
GLP: No information available.

Species: Mouse, female  
NOAEL: 0.02  
Application Route: Skin contact  
Exposure time: Lifespan  
Number of exposures: 2x / w  
Dose: 10-50-100% / 0.02 ml acetone  
Group: yes  
Method: Other  
GLP: no  
Remarks: No pathological findings



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**Aspiration toxicity****Components:****Propylene Glycol:**

No aspiration toxicity classification

**Experience with human exposure****Product:**

General Information : The possible symptoms known are those derived from the labelling (see section 2).

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Propylene Glycol:**Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: Other  
GLP: noToxicity to daphnia and other aquatic invertebrates : LC50 (Mysidopsis bahia (opossum shrimp)): 18,800 mg/l  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: Other  
GLP: yesToxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 19,000 mg/l  
End point: Growth rate  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yesNOEC (Pseudokirchneriella subcapitata (green algae)):  
15,000 mg/l  
End point: Growth rate  
Exposure time: 14 d  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

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- Toxicity to fish (Chronic toxicity) : Chronic Toxicity Value (Fish): 2,500 mg/l  
Exposure time: 30 d  
End point: Other  
Method: Other  
GLP: no
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia spec.): 13,020 mg/l  
Exposure time: 7 d  
End point: Reproduction rate  
Test Type: semi-static test  
Analytical monitoring: yes  
Method: Other  
GLP: No information available.
- Toxicity to bacteria : NOEC (Pseudomonas putida): > 20,000 mg/l  
End point: Growth rate  
Exposure time: 18 h  
Test Type: aquatic  
Analytical monitoring: no  
Method: Other  
GLP: no  
Remarks: The details of the toxic effect relate to the nominal concentration.
- Toxicity to soil dwelling organisms : Remarks: The study is not necessary from a scientific perspective.
- Plant toxicity : Remarks: The study is not necessary from a scientific perspective.
- Sediment toxicity : Remarks: The study is not necessary from a scientific perspective.
- Toxicity to terrestrial organisms : Remarks: The study is not necessary from a scientific perspective.

**Persistence and degradability****Components:****Propylene Glycol:**

- Biodegradability : aerobic  
Inoculum: activated sludge, domestic  
Concentration: 100 mg/l ThOD  
BOD in % of theoretical OD  
Result: Readily biodegradable  
Biodegradation: 100 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
GLP: yes
- aerobic  
Inoculum: activated sludge, domestic  
Concentration: 50.3 mg/l

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CO2 formation in % of theoretical value  
Result: Readily biodegradable  
Biodegradation: 90.6 %  
Exposure time: 64 d  
Method: OECD Test Guideline 306  
GLP: yes

**Bioaccumulative potential****Components:****Propylene Glycol:**

Bioaccumulation : Bioconcentration factor (BCF): 0.09  
Method: calculated  
GLP: no

**Mobility in soil****Components:****Propylene Glycol:**

Distribution among environmental compartments : Adsorption/Soil  
Medium: water - soil  
log Koc: 0.46  
Method: other (calculated)

**Other adverse effects****Product:**

Additional ecological information : no data available

**Components:****Propylene Glycol:**

Environmental fate and pathways : not available

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : Do not allow to enter ground water, waterways or waste water.

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

RCRA - Resource Conservation and Recovery Authorization Act : No -- Not as sold.

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Waste Code : NONE

Waste from residues : Small quantities may be treated in aerobic wastewater treatment systems. Larger quantities may be incinerated or landfilled after solidification in permitted systems.

**SECTION 14. TRANSPORT INFORMATION**

DOT not restricted

IATA not restricted

IMDG not restricted

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Potassium hydroxide	1310-58-3	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

A characteristic waste RQ of 100 lbs applies to this product in a waste form: NONE

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.**Clean Water Act**

Contains no known priority pollutants at concentrations greater than 0.1%.

**The components of this product are reported in the following inventories:**

TSCA On TSCA Inventory

**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -

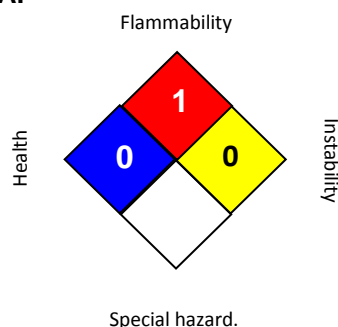
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Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Further information****NFPA:**

Keep container tightly closed.

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# SAFETY DATA SHEET



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This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.

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