

Substance key: 000000344932

Revision Date: 12/09/2015

Version : 6 - 0 / USA

Date of printing :03/15/2016

SECTION 1. IDENTIFICATION

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

Trade name: SAFEWING MP IV LAUNCH -US_23387624129_Tote
Material number: 233876

Primary product use: Aircraft de-icing
Chemical family: polymer-thickened deicer based on propylene glycol, corrosion inhibitors, surfactants and water - green coloured.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical Name	CAS-No.	Concentration (%)
Propylene Glycol	57-55-6	60 - 100

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 irritation occurs, seek medical attention.

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- 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 : Get medical attention immediately.
- 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.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
- Further information : Wear full protective clothing and self-contained breathing apparatus.
- Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Contain spill. Ensure adequate ventilation and wear appropriate personal protective equipment. Collect onto inert absorbent. Place in sealable container. Do not allow to contaminate water sources or sewers.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Wash thoroughly after handling.
Keep container closed.

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

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

Personal protective equipment

Respiratory protection : If airborne concentrations pose a health hazard, become irritating, or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29CFR1910.134.

Hand protection
Remarks : Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear suitable protective equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : viscous liquid

Colour : green

Odour : slightly perceptible

Odour Threshold : not determined

pH : 7 - 7.5
(20 °C)Method: DIN 19261
Determined in the undiluted form

Melting point : -35 °C
Method: ASTM D 2386

Boiling point : 103 °C
Method: ASTM D 1120

Flash point : > 100 °C
Method: ASTM D 92 (closed cup)

Evaporation rate : not determined

Flammability (solid, gas) : Not applicable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure :
not determined

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Relative vapour density	:	not determined
Density	:	1.043 g/cm ³ (20 °C)
Bulk density	:	not determined
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	> 400 °C Method: DIN 51794
Decomposition temperature	:	> 400 °C Method: DIN 51794
Viscosity		
Viscosity, dynamic	:	approx. 10,000 - 20,000 mPa.s (20 °C) Method: ASTM D 2196
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**

None known.

Acute toxicity**Product:**

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

Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

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Components:**Propylene Glycol:**

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

Remarks: not tested.

Components:

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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.

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

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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.

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.

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

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

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

No observed adverse effect level: 0.02

Application Route: Skin contact

Exposure time: Lifespan

Number of exposures: 2x / w

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Dose: 10-50-100% / 0.02 ml acetone
Group: yes
Method: Other
GLP: no
Remarks: No pathological findings

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).

Further information**Product:**

Remarks: The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,443 mg/l
Exposure time: 96 h
Method: OPPTS 850.1075

LC50 (Pimephales promelas (fathead minnow)): 2,443 mg/l
Exposure time: 96 h
Method: OPPTS 850.1075

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna Straus): 976 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Green algae - fresh water (Pseudokirchneriella subcapitata)): 2,228 mg/l
Exposure time: 96 h
Method: EPA OPPTS 850.5400 Algal toxicity, tiers I and II (1996)

Toxicity to bacteria : EC50: 5,200 mg/l
Exposure time: 30 min
Method: ISO 11348-2

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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: no
- Toxicity 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: yes
- Toxicity 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: yes
- NOEC (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
- 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

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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**Product:**

Biodegradability : Biodegradation: 98 %
Exposure time: 7 d
Method: OECD Test Guideline 301E

Biochemical Oxygen Demand (BOD) : 0.34 kg/kg
Method: DIN/EN 1899-1

Chemical Oxygen Demand (COD) : 0.85 kg/kg
Method: DIN ISO 15705-H45

Dissolved organic carbon (DOC) : 0.24 kg/kg
Method: DIN/EN 1484

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
CO₂ formation in % of theoretical value
Result: Readily biodegradable
Biodegradation: 90.6 %
Exposure time: 64 d

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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 : Biologically degradable, when diluted may be degraded in biological purification plants

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.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

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

Waste from residues : Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

SECTION 14. TRANSPORT INFORMATION

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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**

This material does not contain any components with a CERCLA RQ.

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 is not subject to SARA Title III Section 313 reporting requirements under 40 CFR 372.**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

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

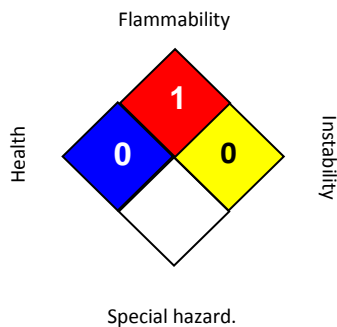
SECTION 16. OTHER INFORMATION**Further information**

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NFPA:

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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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