

MATERIAL SAFETY DATA SHEET

SAFEWING MP IV LAUNCH

Substance key: 000000241110
Version : 1 - 1 / USA

Revision Date: 01/05/2007
Date of printing :01/05/2007

Section 01 - Product Information

Identification of the company:

Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704 331 7000

Information of the substance/preparation:

Product Safety 1-704-331-7710

Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name:

SAFEWING MP IV LAUNCH

Primary product use:

Aircraft de-icing

Chemical family:

polymer-thickened deicer based on propylene glycol, corrosion inhibitors, surfactants and water - green coloured.

Section 02 - Composition information on hazardous ingredients

Hazardous ingredients:

Component	CAS-no. (Trade secret no.)	Concentration
1,2-Propanediol	57-55-6	> 1 %

Section 03 - Hazards identification

Emergency overview:

NO KNOWN HAZARDS.

Expected Route of entry:**Inhalation:**

Not expected to be irritating to the respiratory tract.

Skin contact:

Not expected to be irritating to skin.

Eye contact:

Not expected to be irritating to the eyes.

Ingestion:

Not expected to be toxic.

Known effects on other illnesses:

None known.

Listed carcinogen:

IARC: No

NTP: No

OSHA: No

Other: No

HMIS:

Health: 1

Flammability: 1

Reactivity: 0

Personal protection: B

Section 04 - First aid measures

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After inhalation:

Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped. Get prompt medical attention. Do not give fluids if victim is unconscious.

After contact with skin:

Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.

After contact with eyes:

Immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek prompt medical attention if redness or irritation occurs.

After ingestion:

Seek medical attention immediately.

Advice to doctor / Treatment:

None known.

Section 05 - Fire fighting measures

Flashpoint:	> 212 °F Method: ASTM D 92 (closed cup)
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Self ignition:	not self-igniting
Ignition temperature:	> 752 °F Method: DIN 51794

Hazardous combustion products:

In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)

Extinguishing media:	water spray jet alcohol-resistant foam dry powder carbon dioxide
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Special fire fighting procedure:

Use self-contained breathing apparatus and full protective clothing.

Section 06 - Accidental release measures

Steps to be taken in case of spill or leak:

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 07 - Handling and storage

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Advice on safe handling:

Wash thoroughly after handling.
Keep container closed.

Section 08 - Exposure controls / personal protection

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:	Butyl Rubber, PVC Or Neoprene.
Eye protection:	Safety glasses with side shields.
Other protective equipment:	Clothing suitable to prevent skin contact.

Section 09 - Physical and chemical properties

Form:	Liquid, viscous
Color:	green
Odor:	slightly perceptible
pH:	7 - 7.5 (20 °C) Method: DIN 19261 Determined in the undiluted form
Solubility in water:	soluble
Soluble in ... :	
Solubility / qualitative:	soluble in Glycol
Density:	1.04 g/cm ³ (20 °C) Method: DIN 51757
Melting point :	-31 °F Method: ASTM D 2386
Boiling temperature :	217 °F Method: ASTM D 1120
Vapor pressure:	not determined
Bulk density:	Not applicable
Relative vapor density:	not determined
Partitioning coef. octanol/water:	Not applicable
Viscosity / (dynamic):	approx. 10,000 - 20,000 mPa.s (20 °C) Method: ASTM D 2196
Viscosity / (kinematic):	not determined

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Section 10 - Stability and reactivity

Thermal decomposition:	> 400 °C Method: DIN 51794
Chemical stability:	Stable.
Hazardous Polymerization:	Will not occur.

Section 11 - Toxicological information

Product information:

Acute oral toxicity:	not determined
Acute inhalation toxicity:	not determined
Acute dermal toxicity:	not determined

Other relevant toxicity information:

The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

Section 12 - Ecological information

Product information:

Biodegradation:	98 % (1 d) Method: OECD 301 E Source: Analogy
Fish toxicity:	LC50 2,443 mg/l (96 h, rainbow trout) Method: EPA OPPTS Draft Guideline 850.1075 (1996) LC50 2,443 mg/l (96 h, Fathead minnow) Method: EPA OPPTS Draft Guideline 850.1075 (1996)
Daphnia toxicity:	EC50 542 mg/l (48 h, Ceriodaphnia spec.) Method: US-EPA OPPTS 850.1010
Algae toxicity:	EC50 2,228 mg/l (96 h, Green algae - fresh water (Pseudokirchneriella subcapitata)) Method: EPA OPPTS 850.5400 Algal toxicity, tiers I and II (1996)
Bacteria toxicity:	EC50 5.2 g/l (30 min) Method: DIN EN ISO 11348-2
Dissolved organic carbon (DOC):	245 mg/g Method: DIN/EN 1484 Source: Analogy
Chemical oxygen demand (COD):	830 mg/g Method: DIN 38409-H41 Source: Analogy

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Biological oxygen demand (BOD): 285 mg/g
Method: DIN/EN 1899-1
Source: Analogy

Remarks:

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

Section 13 - Disposal considerations

Waste disposal information:

Recommended disposal is by incineration in approved facilities.

RCRA hazardous waste:

No -- Not as sold.

Section 14 - Transport information

DOT	not restricted
IATA	not restricted
IMDG	not restricted

Section 15 - Regulatory information

TSCA Status:

All components of this product are listed on the TSCA Inventory.

SARA (section 311/312):

Reactive hazard:	no
Pressure hazard:	no
Fire hazard:	no
Immediate/acute:	no
Delayed/chronic:	no

SARA 313 information:

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%.

Section 16 - Other information

Label information:

ATTENTION!

UPON EVALUATION, IT HAS BEEN DETERMINED THAT THIS PRODUCT IS NOT SUBJECT TO THE LABELING REQUIREMENTS OF OSHA REGULATION 29CFR 1910.1200. HOWEVER, GOOD WORK PRACTICES DICTATE THAT CARE BE

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TAKEN TO AVOID SKIN AND EYE CONTACT AND INGESTION. WASHING AFTER HANDLING IS ADVISED.

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. (R) and TM indicate trademarks of Clariant AG, its business partners or suppliers.