

Safety Data Sheet

Issue Date: 24-Aug-2014 Revision Date: 21-Dec-2021 Version 2

1. IDENTIFICATION

Product Identifier

Product Name Lift-Off P-88 Concentrate

Other means of identification

SDS # ALLCLR-002

Recommended use of the chemical and restrictions on use

Recommended Use Aircraft deicer.

Details of the supplier of the safety data sheet

Supplier Address

AllClear Systems, LLC 655 Conshohocken Road, Suite 301 Conshohocken, PA 19428

Ph: 484-567-0680

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear, orange liquid Physical State Liquid Odor None

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS				
Chemical Name	CAS No	Weight-%		
Propylene Glycol	57-55-6	60-100		
1 Topytone Cilycon	01 00 0	00 100		

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

Eve Contact

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Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists:

Get medical advice/attention.

Skin Contact Remove contaminated clothing; wash affected area with soap and water; launder

contaminated clothing before reuse; if irritation persists, seek medical attention.

Inhalation Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison

center if individual's condition declines or if symptoms persist.

Ingestion If swallowed, do not induce vomiting except at the direction of medical personnel, Rinse

mouth. Drink 1 or 2 glasses of water. Get medical attention immediately.

Most important symptoms and effects

Symptoms May cause eye and skin irritation. May cause nausea, vomiting, stomach ache, and

diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician May aggravate pre-existing skin disorders.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water, foam, carbon dioxide, dry powder.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

The product may become combustible after prolonged heating at the boiling point.

Hazardous Combustion Products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate

affected area.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert

(i.e. vermiculite, dry sand or earth) absorbent material.

Sweep up absorbed material and shovel into suitable containers for disposal. Discard any Methods for Clean-Up

product, residue, disposable container or liner in full compliance with federal, state, and

local regulations. For waste disposal, see section 13 of the SDS.

Prevention of Secondary

Hazards

Material can create slippery conditions.

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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

> protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Follow all SDS/label precautions even after container is emptied, because it may retain product residues. Do not breathe

vapors or spray mist. Do not eat, drink or smoke when handling this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away

from incompatible materials.

Packaging Materials Empty containers retain product residue and can be hazardous.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines No exposure limits noted for ingredient(s). The following information is given as general

guidance

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Eyewash

stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear eye protection if splashing is possible.

Chemical impervious gloves. Boots, aprons needed for protection against spill / splashes. **Skin and Body Protection**

Respiratory Protection Not usually necessary under conditions of normal use. In case of inadequate ventilation

wear respiratory protection.

General Hygiene Considerations Wash contaminated clothing before reuse. Wash face, hands and any exposed skin

thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

Appearance Clear, orange liquid Odor None

Color **Odor Threshold** Not determined Clear orange

Property Values Remarks • Method

Ha 7.50-8.50 @ 20°C

Melting Point/Freezing Point 100% Below -70°C

75% v/v -60°C

50% v/v -28 °C

117 °C / 242.6 °F **Boiling Point/Boiling Range**

Flash Point None below boiling point

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Evaporation Rate

Flammability (Solid, Gas)
Upper Flammability Limits
Lower Flammability Limit

Vapor Pressure

Not determined
Liquid-not applicable
Not determined
Not determined

Vapor Pressure

Not mmHq

Vapor Pressure < 10 mmHg @ 68°F (20 $^{\circ}$ C)

Vapor Density 1.6 (estimated) (Air=1)

Specific Gravity > 1.039 @ 20°C (68°F)

Water Solubility
Solubility in other solvents
Partition Coefficient
Completely miscible
Not determined
Not determined

Auto-ignition Temperature > 446 °C / > 834.8 °F

Decomposition TemperatureNot determinedKinematic ViscosityNot determinedDynamic Viscosity20°C 25 mPas

0°C 60mPas

Explosive Properties Not an explosive Oxidizing Properties Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources. Keep separated from incompatible substances.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Incomplete combustion may produce Carbon Monoxide and other harmful gases.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact May cause temporary irritation on eye contact.

Skin Contact May cause temporary irritation on skin contact.

Inhalation Avoid breathing vapors or mists.

Ingestion May cause discomfort if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol	= 20000 mg/kg (Rat)	= 20800 mg/kg (Rabbit)	-
57-55-6			

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Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene Glycol	19000: 96 h	51400: 96 h Pimephales		1000: 48 h Daphnia magna
57-55-6	Pseudokirchneriella	promelas mg/L LC50 static		mg/L EC50 Static 10000: 24
	subcapitata mg/L EC50	710: 96 h Pimephales		h Daphnia magna mg/L
		promelas mg/L LC50 51600:		EC50
		96 h Oncorhynchus mykiss		
		mg/L LC50 static 41 - 47: 96		
		h Oncorhynchus mykiss		
		mL/L LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of WastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Propylene Glycol	Present	Χ		Present		Present	Х	Present	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Not determined

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propylene Glycol	X		X
57-55-6			

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16. OTHER INFORMATION

NFPAHealth Hazards
1Flammability
Not determinedInstability
Not determinedSpecial Hazards
Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection100B

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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