

SAFETY DATA SHEET

Issuing date 18-Jun-2015

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Version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name DRO Pine Oil Quaternary Disinfectant

Other means of identification

Product Code D6127704

Document D6127704

Recommended use of the chemical and restrictions on use

Recommended use Disinfectant

Details of the supplier of the safety data sheet

Distributor

Daley International
4100 W. 76th Street,
Chicago, IL 60652

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)

Company Phone Number 773-284-6565

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard Statements

Causes severe skin burns and eye damage



Appearance Transparent

Physical state Liquid

Odor Pine

Precautionary Statements - Prevention

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information****3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
Isopropyl alcohol	67-63-0	5% - 15%	*
Pine oil	8002-09-3	2.5	*
Alkyl (C12-16) dimethylbenzylammonium chloride	68424-85-1	0.76	*
Octyl Decyl Dimethyl Ammonium Chloride	32426-11-2	0.57	*
Dioctyl dimethyl ammonium chloride	5538-94-3	0.285	*
Didecyl dimethyl ammonium chloride	7173-51-5	0.285	*
Ethanol	64-17-5	< 1%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures for different exposure routes**

General advice	Show this safety data sheet to the doctor in attendance. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency call toll free: 1-800-362-1855.
Eye contact	Hold eye open & rinse with water for 15-20 min. Remove contact lenses, if present, after 5 min, then continue rinsing eyes. Call poison control center or doctor for advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
Inhalation	Remove to fresh air. If qualified give oxygen or artificial respiration as needed and/or seek medical help.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. .
Protection of First-aiders	Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Main Symptoms The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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 Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid breathing vapors or mists.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Keep out of waterways.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep away from open flames, hot surfaces and sources of ignition. Keep container in cool well-ventilated area. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children.

Incompatible products Oxidizers, anionic soaps and detergents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls**Engineering Measures**

Ensure adequate ventilation and that running water is available for washing eyes and skin

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Splash-proof chemical goggles or face shield.

Skin and body protection

Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron..

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical and chemical properties****Physical state**

Liquid

Appearance

Transparent

Color

Amber

Odor

Pine

Odor Threshold

No information available

Property**Values****Remarks • Methods****pH**

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Melting/freezing point

No information available

Boiling point/boiling range

> 100 °C / 212 °F

Flash Point

No information available

Evaporation rate

< 1

Flammability (solid, gas)

No information available

Flammability Limits in Air**Upper flammability limit**

No information available

Lower flammability limit

No information available

Vapor pressure

No information available

Vapor density

No information available

Specific Gravity

1.025 ± 0.005

Water solubility

Completely Soluble

Solubility in other solvents

No information available

Partition coefficient: n-octanol/water

No information available

Autoignition temperature

No information available

Decomposition temperature

No information available

Viscosity, kinematic

No information available

Viscosity, dynamic

No information available

Explosive properties

No information available

Oxidizing Properties

No information available

Other information

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	< 5%
Density VALUE	No information available
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Oxidizers, anionic soaps and detergents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes severe skin burns and eye damage
Inhalation	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
Pine oil 8002-09-3	= 3200 mg/kg (Rat)	= 5 g/kg (Rabbit)	-
Alkyl (C12-16) dimethylbenzylammonium chloride 68424-85-1	= 426 mg/kg (Rat)	-	-
Didecyltrimethylammonium chloride 7173-51-5	= 84 mg/kg (Rat)	-	-
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	-
Ethanol 64-17-5	A3	Group 1	Known	X

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 11072 mg/kg
 ATEmix (dermal) 34605 mg/kg
 ATEmix (inhalation-dust/mist) 64.4 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

8.2814% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Isopropyl alcohol 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50 9640: 96 h Pimephales promelas mg/L LC50 flow-through	13299: 48 h Daphnia magna mg/L EC50
Ethanol 64-17-5	-	100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Isopropyl alcohol 67-63-0	0.05
Ethanol 64-17-5	-0.32

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper disposal of waste product.

Contaminated packaging

Non-refillable container. Empty containers should be triple rinsed, then offered for recycling or reconditioning; or puncture and dispose of in a sanitary landfill. .

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol 67-63-0	Toxic Ignitable
Ethanol 64-17-5	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated
Proper shipping name Cleaning Compound, Not Regulated

15. REGULATORY INFORMATION

International Inventories

TSCA -
 DSL/NDL -
 EINECS/ELINCS -
 ENCS Does not Comply
 IECSC -
 KECL -
 PICCS -
 AICS -

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical Name	California Prop. 65
Ethanol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropyl alcohol 67-63-0	X	X	X
Pine oil 8002-09-3	X	-	-
Ethanol 64-17-5	X	X	X

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

DANGER. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through the skin. This pesticide is toxic to fish aquatic invertebrates, oysters, and shrimp.

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 3	Flammability 0	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health hazard 3	Flammability 0	Physical Hazards 0	Personal protection X

Prepared By

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Revision Note

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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