

**Safety Data Sheet (SDS) for DCD Cleaner**  
OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.  
Date Issued: 08/11/2015;

**1. Identification**

**Product identifier used on label:** **Floralife® DCD Cleaner**

**Other means of identification, synonyms, etc.:** None

**Recommended use of the product and restrictions on use:** Use as a general purpose antimicrobial detergent.

**Manufacturer/Supplier:**

Company name: Floralife, DBA a division of Smithers-Oasis Company  
Address: 751 Thunderbolt Drive  
Waterboro, SC 29488 US  
Phone: 843-538-3839  
Fax: 800-471-4248  
Website: [www.floralife.com](http://www.floralife.com)

**Emergency telephone number(s):**

Emergency Contact:

Rocky Mountain Poison & Drug Center: 303-623-5716 or 877-740-5015

Transportation Emergency: CHEMTREC: 800-424-9300

**2. Hazards Identification**

**Classification of the substance or mixture:**

Physical hazards:	Not classified	
Health hazards:	Skin corrosion/irritation	Category 2
	Serious eye damage	Category 1
Environmental hazards:	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards:	Not classified	

**Label elements:**



Hazard pictograms:

Signal word: **DANGER**

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

**Hazard statements:** Causes serious skin irritation. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

## Precautionary statements:

**Prevention:** Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves. Wear eye/face protection.

**Response:** Collect spillage.  
If on skin: Wash with warm water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a poison center/doctor.  
Specific treatment: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

**Storage:** Store away from incompatible materials.

**Disposal:** Dispose of contents/container in accordance with local/national regulations – see Section 13.

**Hazards not otherwise classified:** None

## 3. Composition Information on Ingredients

### Chemical characterization:

Chemical name & concentration	CAS #	%
Alcohol ethoxylate	Proprietary**	2 - < 5
_Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	85409-23-0, or 68956-79-6	1 - < 3
_Alkyl (68% C12, 32% C14) dimethyl benzyl ammonium chloride	68391-01-5	1 - < 3
Soda ash	68131-39-5	2 - < 5
TRADE SECRET**	Proprietary**	1 - < 3
Ethanol	64-17-5	< 1
Chemia #2412 Citrus Quat	Unknown	< 0.3
FD & C Yellow #5 Dye	Mixture	< 0.1
Water	7732-18-5	80 – 90

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

\*\* Designates that a specific identity and/or percentage of concentration has been withheld as a trade secret.

## 4. First Aid Measures

### General information:

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical attention immediately.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

### Most important symptoms/

**effects, acute and delayed:** Symptoms may include stinging,tearing, redness, swelling, and blurred vision. Permanent eye damage including bklindness could result. Skin irritation. May cause redness and pain.

### Indication of immediate medical attention and special treatment needed:

If the product is ingested, probable mucosal damage may contraindicate the use of gastic lavage. Treat the affected person appropriately.

## 5. Fire Fighting Measures

**Suitable extinguishing media:** Water spray, foam, carbon dioxide or dry chemical.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Special hazards arising from the substance or mixture:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters:** Firefighters should wear full protective bunker gear used in fighting fires, including self-contained breathing apparatus.

**Fire-fighting equipment/ Instructions:** Move containers from fire area if you can do so without risk.

**Specific methods:** Use standard firefighting procedures and consider the hazards of other involved materials.

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

**General fire hazards:** No unusual fire or explosion hazards noted.

## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency

**procedures:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see Section 8 of this SDS.

### Methods and material for containment and cleaning up:

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

**Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see Section 13 of this SDS.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer without previously notifying the local sewerage treatment authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### Environmental precautions:

Avoid release to the environment. Contact local authorities in cases of spillage to drains/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or into the ground.

## 7. Handling and Storage

**Precautions for safe handling:** Do not get this material in contact with eyes. Avoid contact with skin. Avoid contact with clothing. Provide adequate ventilation. Avoid releases to the environment. Do not empty into drains.

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

## Information about protection

**against explosions and fires:** No special measures required.

## Conditions for safe storage,

**including any incompatibilities:**

DO NOT CONTAMINATE WATER< FOOD OR FEED BY STORAGE OR DISPOSAL, PESTICIDE STORAGE. Store in a dry place no lower in temperature than 50 °F or higher than 120 °F. Store in original tightly closed container. Store away from incompatible materials, see Section 10 of this SDS.

## 8. Exposure Controls / Personal Protection

**Occupational exposure limits:**

No exposure limits need for ingredient(s) .

**Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment:**

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Hand protection: Wear appropriate chemical resistant gloves.

Skin protection other: Wear appropriate chemical resistant clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygienic considerations: Always observe good hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

Appearance:

Physical state:

Liquid

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

Color:	Green
Odor:	Citrus scent
Odor threshold:	Not available.
Vapor pressure at 20 °C (68 °F):	Not applicable
Vapor density:	Heavier than air.
Relative density:	8.66 lb/gal
Specific gravity:	1.041 g/ml
pH value:	11.7 (13% solids in aqueous medium).
Change in condition:	
Melting point/Melting range:	32 °F
Boiling point/Boiling range:	212 °F
Flash point:	> 201 °F
Flammability (solid, gaseous):	Not applicable.
Flammable or explosion limits:	
Lower/Upper:	Not available.
Ignition temperature:	600 °F
Auto ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not available.
Danger of explosion:	Product does not present an explosion hazard as shipped.
Solubility in/miscibility with water:	Complete
Evaporation rate:	Slower than ethyl ether
Partition coefficient (n-octanol/water):	Not available.
Viscosity:	< 100 cP @ 25 °C
Dynamic/Kinematic:	Not available.
Solvent content:	
Organic solvents:	Not applicable.
Water:	Moisture content < 6%
Solids content:	>94%
Other information:	Not available.

## 10. Stability and Reactivity

**Reactivity:** This product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical Stability:** Material is stable under normal conditions.

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

**Conditions to avoid:** Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals, or have contact with incompatible materials No known conditions to be avoided.

**Incompatible materials:** Strong oxidizing agents. Anionic surfactants.

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

## Hazardous decomposition products:

Carbon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

## 11. Toxicological information

### Information on the likely routes of Exposure:

Ingestion: May be harmful if swallowed.  
Inhalation: Prolonged inhalation may be harmful.  
Skin contact: Causes skin irritation.  
Eye contact: Causes serious eye damage.

### Symptoms related to the Physical, chemical and Toxicological characteristics:

### Information on toxicological effects:

Acute Toxicity: Of Product

Dermal LD50 Rabbit > 5,000 mg/kg

Oral LD50 Rat > 5,000 mg/kg

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/  
Eye irritation: Causes serious eye damage.

Respiratory or skin sensitization:

Respiratory sensitization: Not available.

Skin sensitization: This product is not expected to cause skin sensitization.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

Specific target organ toxicity -  
single exposure: Not applicable.

Specific target organ toxicity -  
repeated exposure: Not applicable.

Aspiration hazard: Not likely, due to the form of the product.

## 12. Ecological Information

**Ecotoxicity:** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Dermal LD50 Rabbit > 5,000 mg/kg

Oral LD50 Rat > 5,000 mg/kg

Components:

Sodium Carbonate (or soda ash) (CAS # 497-19-8)

Aquatic

Crustacea	EC50	Water flea (Ceriodaphnia dubia)	156.6 – 298.9 mg/l, 48
hrsFish	LC50	Bluegill (Lepomis macrochirus)	300 mg/l 96 hrs

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: Not data available.

Mobility in soil: Not data available.

Additional ecological information: None.

General notes: None.

Other adverse effects: No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Considerations

**Disposal instructions:** PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

(For products with household/residential use-sites only):  
CONTAINER DISPOSAL – Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

(For products with industrial, institutional and commercial use sites):  
CONTAINER DISPOSAL – Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container promptly after emptying.

(For containers 5 gallons or less):  
Triple rinse as follows: Fill container ¼ full with water and recap. Agitate vigorously. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after the flow begins to drip. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

**Local disposal regulations:** Dispose in accordance with all applicable regulations.

**Hazardous waste code:** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

## Waste from residues/reused

**Products:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues, follow label warnings even after container is emptied.

## Contaminated packaging:

## 14. Transport Information

**DOT Non-Bulk:** Not regulated as dangerous goods.

**DOT Bulk:** Not regulated as dangerous goods.

### IATA:

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (QUATERNARY AMMONIUM CHLORIDE)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	YES
Special precautions for use before handling.	Read safety instructions, SDS and emergency procedures

### IMDG:

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (QUATERNARY AMMONIUM CHLORIDE)
Transport hazard class(es)	
Class	9

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

Subsidiary risk -  
Packing group III  
Environmental hazards YES  
Special precautions for use Read safety instruction, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II  
Of MARPOL 73/78 and the IBC Code 4:** Not available..

## 15. Regulatory Information

US Federal Regulations: This product is a USEPA registered pesticide.

This material is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.under OSHA regulations.

CERCLA Hazardous Substance List (29 CFR 1910.1001-1050)  
Not listed.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)  
Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Acute (Immediate) Health Hazard:	Yes
	Chronic (Delayed) Health Hazard:	No
	Fire Hazard:	No
	Reactive Hazard:	No
	Sudden Release of Pressure:	No

SARA 302 Extremely hazardous substances: No

SARA 311/312 Hazardous chemical: No

SARA 313 (TRI Reporting)

Chemical name	CAS number	% by wt.
1,4-dioxane	123-91-1	< 0.1
Acetaldehyde	75-07-0	< 0.1

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List  
Not regulated

Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130)  
Not regulated

Safe Drinking Water Act (SDWA)  
Not regulated

# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

FIFRA Information: This chemical is a pesticide product registered by the Environmental Protection Agency 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.

Signal word: DANGER

Hazard statement: Corrosive.  
Causes irreversible eye damage and skin burns.  
Harmful if swallowed.  
This pesticide is toxic to fish and aquatic invertebrates.

US state regulations:

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.

This product contains chemical(s) known to the State of California to cause cancer or reproductive harm.

International Inventories:

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substance List (DSL)	No
Canada	Non-Domestic Substance List (DSL)	No
China	Inventory of Existing Chemical Substances in China (ECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing & New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals & Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) or is exempt from listing.

A "No" indicates that one or more components of the product are not listed on the inventory administered by the governing country(s).

## 16. Other Information, including date of preparation or last revision

### NFPA ratings (scale 0 - 4)

Health = 1

Fire = 1



# Safety Data Sheet (SDS) for DCD Cleaner

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 04.

Date Issued: 08/11/2015;

Reactivity = 0

## HMIS-ratings (scale 0 - 4)

Health = 1

Fire = 1

Reactivity = 0

Classification system: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

## Disclaimer:

Floralife, DBA a division of Smithers-Oasis Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.