

SAFETY DATA SHEET



SDS No.: 99220C
Date Created: February 9, 2017
Supercedes: None

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Dakota Wash HD Concentrate
General Use: Foaming Cleaner/ Degreaser
Product Description: Clear Purple Liquid

MANUFACTURER

Dakota Ag Innovations, LLC
40690 253rd Street
Mitchell, South Dakota 57301

EMERGENCY TELEPHONE NUMBER:

(800)-424-9300 CHEMTREC USA & CANADA
+1(703)-741-5970 CHEMTREC INTERNATIONAL

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

GHS CLASSIFICATION OF SUBSTANCE

Flammable Liquid	Not Rated Under GHS
Aspiration Toxicity	Not Rated Under GHS
Skin Irritation	Category 3
Eye Irritation	Category 2B
Carcinogenicity	Not Rated Under GHS
Specific Organ Toxicity Repeated Exposure	Not Rated Under GHS
Specific Organ Toxicity Single Exposure	Not Rated Under GHS
Reproductive Toxicity	Not Rated Under GHS
Acute Toxicity	Not Rated Under GHS
Germ Cell mutagenicity	Not Rated Under GHS
Hazardous to the aquatic environment	Not Rated Under GHS

Hazard Category - means the division of criteria within each hazard class, e.g. acute toxicity includes five hazard categories and flammable liquids include four hazard categories. These categories compare hazard severity within hazard class. "GHS Classification of Substance" means the material hazard class under that particular category and should not be taken as a comparison of hazard categories more generally. Degree of severity under GHS is "1" being the most severe and sequential numbers indicating correspondingly less severity. "Not Classified Under GHS" does not have characteristics that fall into any of the categories for that hazard class.

GHS LABEL ELEMENTS

Symbol - No Applicable Symbol

Signal Word - **WARNING**

Hazard Statements

H316 - Causes mild skin irritation

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H320 - Causes eye irritation

Precautionary Statements

General:

P101-If medical advice is needed, have product container or label at hand.

P103-Read label before use.

Prevention:

P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection

Response:

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical attention.

Storage/Disposal:

P403+235+404-Store in well-ventilated place. Keep cool. Store in closed container.

P501-Dispose of contents/container in accordance with local/regional/federal regulations.

UN GHS

According to the Globally Harmonized Standard for Classification and Labeling (GHS), this product is considered hazardous based potential for eye irritation with direct contact with the concentrated liquid product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>wt%</u>	<u>CAS Registry #</u>
Sodium Silicate	<6	10213-79-3
2-Butoxyethanol	<1	111-76-2
Alcohols, C9-11 ethoxylated, < 2.5 EO	<1	68439-46-3
Amino-Containing Compounds	<2	1643-20-5, 141-43-5
Surfactant	<1	1300-72-7
Hydroxides	<2	1310-73-2, 1310-58-3

balance is water and components at concentrations <1%

4. FIRST AID MEASURES

INHALATION:

Remove to fresh air and keep at rest in a comfortable position. Get medical attention if symptoms persist after moving to fresh air. Give oxygen if available, symptoms persist, and medical attention is not immediate.

EYE CONTACT:

Remove contact lens (if present). Rinse eyes immediately with plenty of clean water for at least 15 minutes. If necessary, gently hold the eyelid open during the flush. If eye irritation persists, seek medical attention.

SKIN CONTACT:

Wash skin with mild soap solution to remove material. Product is alkaline and and prolonged contact with concentrated product may irritate skin if left in place.

INGESTION:

Ingestion is not a likely route of entry if used in accordance with manufacturer's instructions. If quantity ingested is suspected to be large, seek medical attention. Do not induce vomiting unless directed to do so by trained medical

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personnel.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: Not Applicable

Flammable Limits: Not Applicable

Autoignition Temperature: Not Applicable

GENERAL HAZARD:

Product is water based and not likely to contribute to a fire. Danger from hot alkaline liquid if heated by an existing fire.

FIRE FIGHTING INSTRUCTIONS:

Water fog or fine spray; dry chemical fire extinguishers; carbon dioxide fire extinguishers; foam; alcohol resistant foams (ATC type). Use water fog or fine spray for cooling exposed containers to control heating.

FIRE FIGHTING EQUIPMENT:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. For small outdoor fires, which may be easily extinguished with a portable fire extinguisher, use of protective equipment is generally unnecessary.

FURTHER INFORMATION:

During a fire, hot liquid presents a splash and corrosive burn hazard.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, carbon dioxide, and organics depending on the heat of the fire.

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL RESPONSE:

Absorb small spills with inert material such as sand or earth. Containerize waste material. Dike large spills to contain the area of the spill. Use clean up procedures that minimize contamination to earth or water bodies.

WATER SPILL:

Material is water based and is expected to mix immediately with the water body. Collection will be difficult but restrict transfer to the localized spill area in the case of a large spill (many gallons) by diking or other means. This material is alkaline and may alter the pH if spill is appreciable.

RECOMMENDED DISPOSAL:

Disposal options may be dictated by other materials mixed with this material. Dispose of in accordance with local, state, and federal regulations using methods which consider recycling/reclamation.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

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GENERAL:

Keep the container tightly closed. Store in a dry, cool, and well-ventilated place away from incompatible materials such as oxidizing agents and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200 and other agencies)

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)				
	OSHA PEL	ACGIH TLV	NIOSH REL	AIHA WEEL	Other
Sodium Silicate	None Established	None Established	None Established	None Established	
2-Butoxyethanol	240 mg/m ³	97 mg/m ³	24 mg/m ³	None Established	49 mg/m ³ (DFG MAK)
Alcohols, C9-11 ethoxylated	None Established	None Established	None Established	None Established	
2-Aminoethanol	6 mg/m ³	7.5 mg/m ³	8 mg/m ³	None Established	5.1 mg/m ³ (DFG)
Sodium Hydroxide	2 mg/m ³	2 mg/m ³	2 mg/m ³	None Established	
Potassium Hydroxide	None Established	2 mg/m ³	2 mg/m ³	None Established	

DFG MAK - Federal Republic of Germany Maximum Concentration Values at the Workplace

ENGINEERING CONTROLS:

Provide adequate general and local exhaust ventilation to maintain exposure below established exposure limits. Provide eyewash stations and safety showers in locations available to material users. Provide hand washing facilities for routine use by personnel using the material.

PERSONAL PROTECTION:

Splash goggles and apron should be worn when pouring this material to avoid contact with the liquid. Hand protection is recommended when there is possible direct contact with the liquid. Glove choice should be appropriate for alkaline blend and the specific activity being performed. NOTE: nitrile gloves are a general purpose glove available in a wide variety of thicknesses and protect against most chemicals. Respiratory protection should be appropriate for exposure and utilized if ventilation cannot be established to adequately maintain exposure within exposure limits such as might occur when cleaning up spills.

EXPOSURE EVALUATION:

This product in concentrated form is not expected to create a respiratory hazard other than as a mist. Primary hazard is direct contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Not Available	Vapor Density:	Not Available
Specific Gravity:	1.06 g/ml	Evaporation Rate:	Not Available
Solubility in Water:	Miscible with water	Freezing Point:	Not Available
		Odor:	Citrus
pH:	9.2	Appearance:	Clear Purple
Boiling Point:	Not Available	Physical State:	Liquid
Viscosity:	Not Available	Flammable Range:	Not Applicable

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Flash Point: Not Applicable

VOC content: <25 g/l

10. STABILITY AND REACTIVITY

GENERAL:

No dangerous reactions known under normal use conditions.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Avoid oxidizers and strong acids.

HAZARDOUS DECOMPOSITION:

May decompose at high temperature. Thermal decomposition generates carbon dioxide and carbon monoxide. Other decomposition are dependent on temperature.

11. TOXICOLOGICAL INFORMATION

TOXICITY TO ANIMALS:

<u>Component</u>	<u>Acute Test</u>	<u>Value</u>	<u>Species</u>
Dodecyldimethylamine oxide	LD50 Oral	2,700 mg/kg	mouse
Dodecyldimethylamine oxide	Irritation - skin	severe	rabbit
Dodecyldimethylamine oxide	Irritation - eyes	serious eye irritation	rabbit
2-aminoethanol	LD50 Oral	1,089 mg/kg	rat
2-aminoethanol	LD50 dermal	1,015 mg/kg	rabbit
2-aminoethanol	OECD 404 - skin	causes burns	rabbit
2-aminoethanol	OECD 404 - eyes	corrosive	rabbit
Sodium metasilicate	LD50 Oral	847 mg/kg	rat
2-butoxyethanol	LD50 Oral	>5,050 mg/kg	rat
2-butoxyethanol	skin corrosion/irritation	mild skin irritation - 72h	rabbit
2-butoxyethanol	eye damage/eye irritation	serious eye irritation	rabbit

ROUTES OF ENTRY:

Primary routes of entry are skin and eyes. Volatile components are not of sufficient concentration for vapor to be an inhalation hazard. A mist will present an inhalation hazard corrosive to respiratory tissue.

CHRONIC EFFECTS ON HUMANS:

Amine containing compounds can elicit allergenic responses in exposed individuals. Available toxicological component information does not indicate long term chronic effects on humans other than potential for skin sensitization with repeated, prolonged skin contact.

Eyes:

Concentrated liquid is irritating to the eyes. Alkaline nature of the concentrated product could result in non-reversible eye damage if not promptly removed from the eyes.

Skin:

Concentrated liquid is irritating to skin with the potential for allergenic response in individuals with pre-existing allergies to amine containing products.

Ingestion:

Not an expected route of exposure. Alkalinity could result in digestive distress if a sufficient quantity is ingested. Do not induce vomiting unless instructed to do so by trained medical personnel.

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Inhalation:

Not an important route of exposure unless introduced as a mist. Product is alkaline and will be corrosive to the respiratory system in mist form. Vapor is not expected to be appreciable based on low concentration of volatile components.

12. ECOLOGICAL INFORMATION

<u>Species</u>	<u>Test Information</u>	<u>Concentration</u>	<u>Component</u>
Cyprinus carpio (Carp)	semi-static LC50	150 mg/l - 96h	2-aminoethanol
Daphnia magna (water flea)	semi-static LC50	65 mg/l - 48h	2-aminoethanol
Selenastrum capricornutum	static test EC50	2.8 mg/l-72h	2-aminoethanol
Pseudomonas putida (bacteria)	static test EC50	110 mg/l-17h	2-aminoethanol
Lepomis macrochirus	LC50	1490 mg/l-96h	2-butoxyethanol
Daphnia magna (water flea)	EC50	1815 mg/l-24h	2-butoxyethanol

PRODUCTS OF BIODEGRADATION:

Product is expected to readily biodegrade with products of biodegradation are expected to be less toxic than the product, itself. Large volume of spilled material in a water body may temporarily alter pH.

13. DISPOSAL CONSIDERATIONS

Dispose of any waste in compliance with local, state, and federal regulations. Determine EPA RCRA waste categorization at the time of disposal as mixing with other materials may change its categorization. Containers may contain residue that needs to be addressed at time of disposal. Recycling containers needs to address any remaining residues.

14. TRANSPORT INFORMATION

The following proper shipping name, hazard class and packing group are in accordance to 49 CFR Department of Transportation (U.S. DOT) regulatory requirements from 172.101 Hazardous Materials Table

49 CFR Shipping Information	Dakota Wash HD Concentrate
Symbols	"G" - identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description. See 172.203(k).
UN Number	Not Regulated
Proper Shipping Name	
Hazard Class	
Packing Group	
Label Codes	

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Special Provisions (172.102)	
Packaging - Exceptions	
Packaging - Nonbulk	
Packaging - bulk	
Quantity Limitations - Passenger aircraft/rail	
Quantity Limitations - Cargo aircraft only	
Vessel stowage - Location	
Vessel stowage - Other	

15. REGULATORY INFORMATION

Chemical Inventory Status

Ingredients listed on: TSCA, DSL, Japan, and EC inventories.

SARA Section 302 - Emergency Planning Notification - None

SARA Section 304 - Emergency Release Notification - Glycol Ethers are listed under 313. 2-butoxyethanol is a glycol ether.

SARA 311/312 - Hazard categories for SARA Section 311/312 Reporting -

CERCLA - Hazardous Substance -

RCRA Hazardous Waste Classification - None

California Proposition 65:

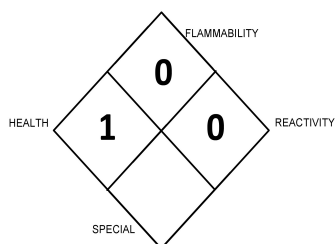
Ethylene oxide may be a trace contaminant in an ingredient. Ethylene oxide is on the Prop 65 chemical list.

No other known components are on the CA Prop 65 list.

16. OTHER INFORMATION

UNITED STATES NATIONAL FIRE PROTECTION ASSOCIATION (U.S. NFPA)

NFPA 704 "fire diamond" is used by emergency personnel to quickly identify the risks posed by the material during response to a fire or a spill or other unusual event.



NFPA rating explanation as applied to

FLAMMABILITY 0 - Materials that will not burn under typical fire conditions. Materials will not burn in air when exposed to a temperature of 1500 F/820 C for a period of 5 minutes.

HEALTH 1 - Exposure would cause irritation with only minor residual injury.

REACTIVITY 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

SPECIAL - contains special symbols applicable to the material. In this case there are no applicable special conditions.

CREATION/REVISION SUMMARY:

Created on:

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