

MATERIAL SAFETY DATA SHEET Disodium Octaborate Tetrahydrate

Section 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

MANUFACTURED FOR:
MAR VISTA RESOURCES, LLC
745 NORTH AVE
CORCORAN, CA 93206

EMERGENCY TELEPHONE NO.:
DAYS: (559) 992-4535
24 Hour Emergency HAZMAT Response: (800) 424-9300
EPA National Response Center: (800) 424-9300

PRODUCT NAME: Disodium Octaborate Tetrahydrate
PRODUCT SYNONYMS:
CHEMICAL NAME/CLASS: Inorganic Borates
CHEMICAL FORMULA: $\text{Na}_2\text{B}_8\text{O}_{13} \cdot 4\text{H}_2\text{O}$
PRODUCT USE: Various Industrial and Agricultural Applications

Section 2 - -COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS REGISTRY NUMBER	TYPICAL WT %
Disodium Octaborate Tetrahydrate	12280-03-4	>98%

Section 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE: White Powder
ODOR: Odorless

PHYSICAL FORM: Solid
SIGNAL WORD: Caution

EMERGENCY OVERVIEW: Product is not flammable, combustible or explosive and has a low acuter oral and dermal toxicity. In large quantities it is toxic to plant and other species. Animal studies have shown borates to have reproductive/developmental effects.

	ACGIH (TLV)	NIOSH REL	OSHA PEL
Disodium Octaborate Tetrahydrate	10 mg/m ³	N/A	15 mg/m ³

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: Symptoms of over exposure can be nausea, vomiting/abdominal pain, diarrhea, with delayed skin redness and peeling.

INHALATION: Product is mildly irritating to the nose, throat and respiratory tract

CONTACT WITH SKIN: Prolonged or repeated contact may irritate slightly.

CONTACT WITH EYES: Contact this product may irritate eyes slightly.

INGESTION: Small amount, a teaspoon or should have no effects. Ingestion of larger quantities may cause gastrointestinal distress.

ACUTE: May cause abdominal distress if ingested in large amounts

HEALTH: 1 REACTIVITY: 0 FLAMMABILITY: 0 ENVIRONMENT: 1
(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

Section 4 – FIRST AID MEASURE

SKIN EXPOSURE: No treatment is necessary. Product is non-irritating

EYE EXPOSURE: Flush the eye at an eye wash station or with fresh water to cleanse the eye. If irritation persist for more than 30 minutes seek medical attention.

INHALATION: If nose or throat irritation is observed, move person to fresh air.

INGESTION: Swallowing small amounts will cause no harm to healthy adults. If larger amounts are swallowed then give two glasses of water to drink and see medical Attention. Never give anything by mouth to an unconscious person.

Section 5 – FIRE FIGHTING MEASURES

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FLASH POINT: Not Applicable. Product is non-flammable

AUTOIGNITION TEMPERATURE: Not Applicable.

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not applicable.
Upper (UEL): Not applicable.

FIRE EXTINGUISHING MATERIALS: Any extinguisher may be used on a nearby fire. Product is a flame retardant.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SPECIAL FIRE-FIGHTING PROCEDURES: Product is non-flammable. It has been used as a fire retardant.

Section 6 – ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR LEAK: This product at high concentration may damage trees or vegetation by root absorption. **Land Spills:** Collect dry product my shovel, vacuum or other means, and dispose of according to local regulations. Avoid contamination of water bodies during clean up and disposal. **Spillage in Water:** Remove intact containers from water if possible. Notify local authorities that water should not be used for irrigation until boron levels return to normal for that body of water.

Deactivating Material: N/A

Note – Clean-up material may be a RCRA Hazardous Waste on disposal
Spills are subject to CERCLA reporting requirements: RQ = N/A

Section 7 – HANDLING AND STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Wear appropriate Personal Protection Equipment. As with all chemicals, avoid getting this product on you or in you. Wash hands after handling this product. Do not eat, drink, smoke or apply cosmetics while handling this product.

STORAGE AND HANDLING PRACTICES: No special handling procedures are necessary, although dry indoor storage is recommended.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: No known hazards.

Section 8 – EXPOSURE CONTROL, PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Use adequate local or general ventilation where necessary to maintain the concentrations well below the recommended occupational exposure limits. Ensure the eyewash stations and safety showers are proximal to the work area.

RESPIRATORY PROTECTION: If dust levels are expected to exceed recommended levels, then wear a NIOSH approved respirator for dust.

EYE PROTECTION: Wear May be warranted in excessively dusty environment.

HAND PROTECTION: Typically not requires.

BODY PROTECTION: Coverall are recommended but not required.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY: N/A

BULK DENSITY: Not Available

SOLUBILITY IN WATER: 9.7 @ 20 C, 34.3 @ 50C

VAPOR PRESSURE: Negligible (VP water @ 20C)

ODOR THRESHOLD: N/A

SPECIFIC GRAVITY: N/A

APPEARANCE AND COLOR: White Powder

HOW TO DETECT THIS SUBSTANCE (warning properties): Odorless

EVAPORATION RATE (n-BuAc = 1): N/A.

FREEZING POINT or RANGE: None

BOILING POINT: N/A

pH @ 15°C (59°F): 8.3 (3%) and 7.6 (10%)

LOG WATER/OIL DISTRIBUTION COEFFICIENT: Not available

Section 10 – STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions of temperature and pressure.

DECOMPOSITION PRODUCTS:

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Reaction with strong reducing agents will generate Hydrogen Gas which could present an explosion hazard.

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HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid strong reducing agents

Section 11 – TOXICOLOGICAL INFORMATION

Test	Result	Route	Species
LD50	2550 mg/kg	Oral	Rat
LD50	>2000 mg/kg	Dermal	Rat

CARCINOGENICITY: No human effects are observed.

REPRODUCTIVE EFFECTS: No

MUTAGENICITY: N/A

TERATOGENICITY: N/A

Section 12 – ECOLOGICAL INFORMATION

Boron is the element in disodium octaborate tetrahydrate which is used by convention to report borate ecological effects. Boron is naturally occurring and ubiquitous in the environment. Large quantities of Boron released to the environment can lead to plant damage as well as destruction of fresh water life. Product should only be release to the environment as part of a balance plant nutrition program.

Biodegradation: Degrades to natural borate.

Photodegradation: Does not photo-degrade.

Section 13 – DISPOSAL CONSIDERATIONS

Small quantities may be disposed of in a land fill sight. No special disposal treatment is required. However, consult state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulation.

Section 14 – TRANSPORT INFORMATION

United States (Under DOT)

Shipping Name: Not Regulated
Hazard Class or Division:
Product Identification No. (PIN):
Packing Group:
Reportable Quantity (RQ): none

Canada (Under TC)

Shipping Name: not regulated
Classification:
Product Identification No. (PIN):
Packing Group

Section 15 – REGULATORY INFORMATION

UNITED STATES:

SARA TITLE III HAZARD CATEGORIES AND LISTS

Category		List	
Acute (Immediate) Health	No	Extremely Hazardous Substance	No
Chronic (Delayed) Health	No	(40CFR 355, SARA title III Section 302)	
Fire	No	CERCLA Hazardous Substance	NO
Reactivity	No	(40CFR 302.4)	
Sudden Release of Pressure	No	Toxic Chemical	No
		(40CFR 372.65, SARA Title III Section 313)	

Reportable Quantity (RQ): None

TSCA Inventory Status: Reported/Included

Right-To-Know:

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): No

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CANADIAN:

INGREDIENTS LISTED ON
DSL.....YES

WHMIS CLASSIFICATION..... Class D,
2A

WHMIS HEALTH EFFECTS INDEX.....Not
Known

WHMIS Ingredient Disclosure List:

All information contained in this Material Safety Data Sheet is furnished free of charge and is intended for your evaluation. In our opinion the information is, as of the date of this Material Safety Data Sheet, reliable, however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information gathered by you, and you must make independent determinations of the suitability and completeness of the information from all sources to assure both proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee is expressed or implied as to the results to be obtained based upon your use of the information.