

# SAFETY DATA SHEET

MP-88 MP-224

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

## Section 1: Chemical Product and Company Identification

**Product Name:** MP-88 MP-224  
**Product Use:** Bioremediation product that converts hydrocarbons, chlorinated hydrocarbons, and most organic based material or waste to CO<sub>2</sub> and H<sub>2</sub>O

**Distributor's Name:** Ovation-Scientific  
**Address:** 324 S Palm ave, Suite A  
Alhambra CA 91803 USA  
626-755-5064

**Telephone Number:**  
**Toll Free:**  
**Fax:**  
**Safety Data Sheet Competent Person:**

**Supplier's Name:** Ovation-Scientific  
**Address:** 324 S Palm ave, Suite A  
Alhambra CA 91803 USA

**Emergency Phone Number:** 626-755-5064

**Date Prepared:** January 1, 2021  
**Date Reviewed:** February 28, 2023



## Section 2: Hazards Identification

**GHS Hazard Class:** NONE

**GHS Label elements, including precautionary statements:**

**Pictogram:** NONE  
**Signal word:** NONE  
**Hazard Statement(s):** NONE.  
**Precautionary Statement(s):** NONE.

**Hazard(s) Not Otherwise Classified (HNOC):** Not classified  
**HAZARD CLASSIFICATION:** Not classified as hazardous based on IATA, IMDG, and DOT.  
**FIRE AND EXPLOSION:** Not considered flammable or combustible.  
**POTENTIAL HEALTH EFFECTS:** <2.5 % of mixture consists of ingredients of unknown acute toxicity.

## Section 3: Composition/Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.
Deionized Water	80-90	7732-18-5
Sugar	1.5-2	50-99-7
Molasses	1-2	---
Malt	1-2	8029-43-4
Nitrogen (Urea)	0.01-0.09	57-13-6
Bio Surfactant	0.06-0.08	64366-70-7
Amylase	0.01-0.03	9000-90-2
Protease	0.01-0.03	9014-01-1

Bonafide requests for disclosure of proprietary mixture information to medical personal must be made in accordance with the provision contained in 29 CFR 1910.1200 I 1-13.

## Section 4: First Aid Measures

### Description of First Aid Measures

<b>Inhalation:</b>	Inhalation of vapors from this product pose no acute or chronic hazard.
<b>Skin contact:</b>	Prolonged exposure to skin may cause some drying of the skin. Wash off with water.
<b>Eye contact:</b>	Flush eyes with copious quantities of water. If irritation persists, seek medical attention.
<b>Ingestion:</b>	If less than ½ liter is ingested, no toxic symptoms should occur. Wash out mouth and seek medical attention if more than ½ liter is ingested.

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

In case of accident or if you feel unwell, seek medical advice immediately.

## Section 5: Fire-fighting Measure

<b>Specific hazard:</b>	OSE II is a fire retardant. However, if applied to a burning fire, there can be a slight flash before fire goes out.
<b>Flammable limits in air (%by vol):</b>	Non-flammable.
<b>Extinguishing media:</b>	None required. Product is a fire retardant (Method used: ASTM-D56).
<b>Unsuitable extinguishing media</b>	None required. Product is a fire retardant.
<b>Protective equipment:</b>	Proper protective equipment including breathing apparatus must be worn when approaching any fire.
<b>Special firefighting procedures:</b>	None – fire retardant.
<b>Unusual fire and explosion hazards:</b>	None.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment, and emergency procedures

<b>PERSONAL PRECAUTIONS:</b>	Avoid contact with eyes. Wash from skin or eyes as needed.
<b>PERSONAL PROTECTION:</b>	Wear goggles if applying in windy conditions. Wear protective rubber gloves if applying directly in a prolonged situation.

### Environmental precautions

<b>ENVIRONMENT PRECAUTIONS:</b>	Wash down with water. Will help clean soil, drains, or water
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### Methods and materials for containment and cleaning up

<b>CLEAN-UP METHODS – SMALL SPILLAGE:</b>	Wash down with water. Non-toxic to the environment.
<b>CLEAN-UP METHODS – LARGE SPILLAGE:</b>	Same as for small spills.

## Section 7: Handling and Storage

<b>Handling:</b>	When handling product in drums, safety footwear should be worn. However, no special handling procedures required.
<b>Storage:</b>	Keep in cool, dry area. Avoid direct sunlight and excessive heat. Do not store where temperature exceeds 120°F. Recommended materials are polyethylene drums or PVC.
<b>Other Information:</b>	Product can freeze/thaw without any negative effect on product.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

<b>OCCUPATIONAL EXPOSURE STANDARDS:</b>	None established (none toxic)
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### Personal Protection

<b>WORK/HYGIENE PRACTICES:</b>	Wash hands before eating or drinking.
<b>RESPIRATORY PROTECTION:</b>	Not normally required.
<b>HAND PROTECTION:</b>	Any plastic or rubber glove if needed; not normally required.
<b>EYE PROTECTION:</b>	Wear safety glasses or goggles if applying in windy conditions.

BODY PROTECTION:

Not normally required.

## Section 9: Physical and Chemical Properties

PHYSICAL STATE:	Liquid with the same density of H <sub>2</sub> O
APPEARANCE – COLOR:	Amber to brown
ODOR:	Some smell of ferment
ODOR THRESHOLD:	Not available
BOILING POINT:	214 °F (102°C)
SPECIFIC GRAVITY (@20 °C):	1.05
MELTING POINT:	Not available
FREEZING POINT:	Not available
DROPPING POINT:	Same as H <sub>2</sub> O
pH:	~6.5-7
VAPOR PRESSURE:	Same as H <sub>2</sub> O
DENSITY:	Same as H <sub>2</sub> O. 1.1
VAPOR DENSITY:	1.1
EVAPORATION RATE:	Not available
VISCOSITY:	Not available
SOLUBILITY IN WATER:	100%
OXIDIZING PROPERTIES:	Not available
AUTO-IGNITION TEMPERATURE:	Non-igniting
DECOMPOSITION TEMPERATURE:	Not available
FLASH POINT:	Same as H <sub>2</sub> O in excess – 7000°F – retardant (Method used: fire)
FLAMMABILITY LIMIT – LOWER:	Nonflammable
F FLAMMABILITY LIMIT – UPPER:	Nonflammable
N-octanol/water Partition Coefficient:	100% soluble – non partitioning
CORROSIVE:	No

## Section 10: Stability and Reactivity

STABILITY:	Stable.
CONDITIONS TO AVOID:	Temperature above 120°F and direct sunlight during storage or transporting.
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	None. Decomposes to CO <sub>2</sub> and H <sub>2</sub> O.
HAZARDOUS POLYMERIZATION:	Will not occur.

## Section 11: Toxicological Information

Toxicity tests have been performed. OSE II is virtually nontoxic.

GHS Required Criteria	Toxicity Criteria	Data	Comments	Chemical Constituent
Acute Toxicity	ATE <sub>(MIX)</sub> Oral	>940,000mg/kg	Can become toxic if more than 60 ml (2oz.) is ingested.	Product
	ATE <sub>(MIX)</sub> Dermal	Not available	None	Product
Skin Corrosion/Irritation	---	Not available	Skin can dry slightly if prolonged direct exposure	Product
Serious Eye Damage / Eye Irritation	---	Not available	Slightly irritant alleviated by copious eye washing	Product
Respiratory or Skin Sensitization	---	Not available	Not expected to be a skin sensitizer.	Product
Germ Cell Mutagenicity	---	Not available	Not a mutagenic	Product
Carcinogenicity	---	Not available	Not a carcinogen	Product
Reproductive Toxicity	---	Not available		
STOST -- Single Exposure	---	Not available		
STOST – Repeated Exposure	---	Not available		
Aspiration Hazard	---	Not available		
Ames test	---	Not available		
Human effects	---	Not available	None expected	Product

ATE<sub>MIX</sub> = Acute Toxicity Estimate of mixture

## Section 12: Ecological Information

Ecotoxicological data has been determined specifically for this product. Information given is for specific sensitive (aquatic) species in fresh and salt water.

Criteria	Environmental impacts	Chemical constituent
Toxicity:	LC50 Brine shrimp >1,900 mg/l up to 10,000 mg/l LC50 Fundulus Heterocletus 96 hour – 5,258 mg/l LC50 Rainbow Trout 10,000 mg/l LC50 Fathead Minnows (Pimephales promelas) – 9,300 mg/l IC10 Milky oyster (Saccostrea echinata) 48hour – 11.0 mg/l EC50 Milky oyster (Saccostrea echinata) 48hour – 16.5 mg/l NOEC Milky oyster (Saccostrea echinata) – 10 mg/l LOEC Milky oyster (Saccostrea echinata) – 20 mg/l EC10 Mussel (Mytilus galloprovincialis), 72hour >20mg/l EC50 Mussel (Mytilus galloprovincialis), 72hour >20mg/l NOEC Mussel (Mytilus galloprovincialis) >20mg/l LOEC Mussel (Mytilus galloprovincialis) >20mg/l	Product
Bioaccumulative potential	None	Product
Persistence and degradability:	Product completely biodegrades in water or soil environment and will not persist.	Product
Mobility in soil:	Liquid that floats on water and solubilizes rapidly. If it comes in contact with soil will percolate at the same rates as H <sub>2</sub> O and will biodegrade rapidly.	Product
PBT and vPvB assessment:	No information is available.	Product
Other adverse effects:	No information is available.	Product

## Section 13: Disposal Considerations

Completely rinse container prior to disposal. Dispose of in accordance with Federal, State and local regulations. Large quantities of waste may require adjustment to a neutral pH. None of the chemicals used in the product are listed as a Priority Pollutant in Appendix A to 40 CFR, Part 423—126 Priority Pollutants.

## Section 14: Transport Information

Not dangerous for conveyance under UN, IMO, ADRiRID.

**DOT TRANSPORT:** Not Regulated

**ADR = International Carriage of Dangerous Goods by Road:** Not Regulated

**RAIL TRANSPORT:** Not Regulated

**SEA TRANSPORT:** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

**AIR TRANSPORT:** Not classified as Dangerous Goods by the criteria of the International Air Transportation Association (IATA) Dangerous Goods Regulations for transport by air.

## Section 15: Regulatory Information

**TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:**  
All of the ingredients in this product are TSCA listed.  
Other information: US DOT class 55 non hazardous  
Dangerous Constituents: None.

**EC CLASSIFICATION:**  
Not known.

EC SYMBOLS:  
Not known.

EC RISK PHASES:  
Not known.

EINECS (EC):  
Not known.

## Section 16: Other Information

Revision Number: 2.0  
Revision explanation: GHS compliant. Format and information in sections 2, 3, 11, 12, 16 updated  
Information Sources: RTECS, OSHA 29CFR 1910.1200

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