



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

OPTIDOSE (TM) 4210 Traceable Polymer

Revision date: 10/29/2010

Supplier

Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA ☐ 19106-2399 ☐ United States of America

For non-emergency information contact: ☐ 215-592-3000**Emergency telephone number**

Spill Emergency	215-592-3000
Health Emergency	215-592-3000
Chemtrec	800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
poly(Maleic acid)	26099-09-2	48.0 - 52.0%
Water	7732-18-5	48.0 - 52.0%

3. HAZARDS IDENTIFICATION

Emergency Overview**Appearance**

Form liquid ☐
Colour amber ☐ clear ☐
Odour Aromatic odor ☐☐☐

Hazard Summary**WARNING!**

CAUSES SEVERE EYE IRRITATION.
INHALATION OF VAPOR/MIST CAUSES SEVERE RESPIRATORY
TRACT IRRITATION.
CAUSES SEVERE DIGESTIVE TRACT IRRITATION.

Potential Health Effects**Primary Routes of Entry:**

☐ Inhalation
☐ Eye contact
☐ Skin contact

Eyes:Material can cause the following:

Severe irritation

Corneal opacity

May cause permanent eye injury.

Skin:Material can cause the following:

slight irritation

Ingestion:May be harmful if swallowed.

Material can cause the following:

burning and severe swelling of the mouth, throat, and digestive tract

Inhalation:Inhalation of vapor or mist can cause the following:

irritation of nose, throat, and lungs

Inhalation of high vapor or mist concentrations can cause the following:
severe irritation of nose, throat, and lungs

4. FIRST AID MEASURES

Inhalation: Move to fresh air. ☐ If breathing is irregular or stopped, administer artificial respiration. ☐ Immediate medical attention is required.

Skin contact: Wash off with soap and water. ☐ If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. ☐ Call a physician immediately.

Ingestion: Clean mouth with water and drink afterwards plenty of water. ☐ If swallowed, seek medical advice immediately and show this container or label. ☐ Do NOT induce vomiting. ☐ Never give anything by mouth to an unconscious person. ☐ If a person vomits when lying on his back, place him in the recovery position.

Notes to physician: MATERIAL IS SEVERELY IRRITATING. ☐ It may not be advisable to induce vomiting. ☐ Possible mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Flash point Noncombustible

Lower explosion limit Not Applicable

Upper explosion limit Not Applicable

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

Specific hazards during fire fighting: Heat or strong acids can form hydrogen gas. ☐ Hydrogen is extremely flammable and can form explosive mixtures with air. ☐ Do not allow run-off from fire fighting to enter drains or water courses. ☐ Move containers promptly out of fire zone. ☐ If removal is impossible, cool containers with water spray. ☐ DO NOT permit water to enter containers.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit. ☐ Material is corrosive. If exposed to material as-is or mixed with run-off water during fire-fighting, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures, for further information.

Further information: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Evacuate personnel to safe areas.

Refer to protective measures listed in sections 7 and 8.

Ensure adequate ventilation.

Environmental precautions

Prevent product from entering drains.

Do not contaminate surface water.

Methods for cleaning up

Evacuate personnel to safe areas.

Contain spills immediately with inert materials (e.g., sand, earth).

Neutralize spill with slaked lime, sodium bicarbonate, or crushed limestone.

Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

Spread soda ash or lime to neutralize any remaining acidity.

Transfer spilled material to suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Handling

Appropriate protective equipment must be worn when handling a spill of this material. ☐ See SECTION 8, Exposure Controls/Personal Protection, for recommendations. ☐ Addition to water releases heat which can result in violent boiling and spattering. ☐ Always add slowly and in small amounts. Never use hot water. ☐ Never add water to acids. ☐ Always add acids to water. ☐ CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. ☐ Since emptied containers retain product residue

follow all MSDS and label warnings even after container is emptied.

Storage

Storage conditions: Keep container tightly closed in a dry and well-ventilated place. ☐ Avoid temperature extremes during storage; ambient temperature preferred.

Storage temperature: 1 - 49 °C (34 - 120 °F)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. ☐ None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. ☐ Up to 10 times the exposure limit: ☐ Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 10 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. ☐ Air purifying respirators should be equipped with acid gas cartridges and N95 filters. ☐ If oil mist is present, use R95 or P95 filters.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Engineering measures: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid <input type="checkbox"/>
Colour	amber <input type="checkbox"/> clear <input type="checkbox"/>
Odour	Aromatic odor <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
pH	1.0 - 2.0
Boiling point/boiling range	100 °C <input type="checkbox"/> (212.00 °F) Water
Flash point	Noncombustible
Lower explosion limit	Not Applicable
Upper explosion limit	Not Applicable
Vapour pressure	17.0 mmHg at 20 °C <input type="checkbox"/> (68.00 °F) <input type="checkbox"/> <input type="checkbox"/> Water
Relative vapour density	0.6
Water solubility	completely soluble
Relative density	1.16
Viscosity, dynamic	40.000 - 50.000 mPa.s at 25.00 °C <input type="checkbox"/> (77.00 °F)
Evaporation rate	<1.00 Water
Percent volatility	48 - 52 % <input type="checkbox"/>

NOTE: ☐ The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Hazardous reactions	None known. Stable
Conditions to avoid	<input type="checkbox"/> Avoid freezing <input type="checkbox"/>
Materials to avoid	Strong Oxidizers <input type="checkbox"/> Bases <input type="checkbox"/>

Hazardous decomposition products Thermal decomposition may yield the following: , monomer vapors ,

polymerisation Product will not undergo polymerization.

11. TOXICOLOGICAL INFORMATION

Skin irritation rabbit slight irritation

12. ECOLOGICAL INFORMATION

There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Environmental precautions: Prevent product from entering drains.

Do not contaminate surface water.

Disposal

Waste Classification: ☐ ☐ D002

When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste with the characteristic of corrosivity.

Solutions with low pH-value must be neutralized before discharge. ☐ For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations (see 40 CFR Part 268).

14. TRANSPORT INFORMATION

DOT

Not regulated for transport

IMO/IMDG

Not regulated (Not dangerous for transport)

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations

15. REGULATORY INFORMATION

Workplace Classification

OSHA: This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

WHMIS : This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III:Section 311/312 Categorizations (40CFR370): Acute Health Hazard

CERCLA Information (40CFR302.4)

See Section 13, Disposal Considerations, Subsection Disposal, for CERCLA classification.

US. Toxic Substances Control Act (TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

16. OTHER INFORMATION

HMISHazard Rating

Health	Fire	Reactivity	Physical Hazard	PPE
3	0	0		

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

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.

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