

MATERIAL SAFETY DATA SHEET

HRS™ II



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This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the Canada's Workplace Hazardous Materials Information System (WHMIS) and, the EC Directive, 2001/58/EC.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HRS™ II
GENERAL USE: Foaming agent, Surfactant

MANUFACTURER

FMC CORPORATION
FMC Peroxygens
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS

(303) 595-9048 (Medical - U.S. - Call Collect)
For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Colorless to opaque liquid.
- Slight fire hazard when exposed to high temperatures or flames.
- No flash point observed up to 104°C (220°F).

POTENTIAL HEALTH EFFECTS: Based on the ingredients, this product may be irritating to skin and eyes. Prolonged skin contact may cause dermatitis. Inhalation of vapors or mist may be irritating to the respiratory system.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. %	EC No.	EC Class
Trade Secret			None	Not classified
Water	7732-18-5	>85	231-791-2	Not classified

COMMENTS: FMC is withholding the specific chemical identity under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(1)). The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200 (1) (2) (3) (4). This Material Safety Data Sheet provides information for employee training and hazard identification.

4. FIRST AID MEASURES

EYES: Flush with water for at least 15 minutes. If irritation occurs and persists, contact a medical doctor.

SKIN: Wash with plenty of water. Get medical attention if irritation occurs and persists.

INGESTION: Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Contact a medical doctor.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: Based on the ingredients, this product may be irritating to skin and eyes. Inhalation of vapors or mist may be irritating to the respiratory system. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, alcohol foams, CO₂ or water spray.

FIRE / EXPLOSION HAZARDS: Slight fire hazard when exposed to high temperatures or flames.

FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Use flooding quantities of water or chemical type extinguishers.

FLAMMABLE LIMITS: Not available

SENSITIVITY TO IMPACT: No data available

SENSITIVITY TO STATIC DISCHARGE: No data available

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate spill or leak area, contain / recover as much of material as possible. Ventilate area before entering. Wear appropriate protective equipment. Spilled material can be absorbed with sand, earth or other inert / non-combustible material. Prevent entry into storm or sanitary sewer systems.

7. HANDLING AND STORAGE

HANDLING: Follow good industrial hygiene procedures when handling material. Empty drum as thoroughly as possible.

STORAGE: Keep in tightly closed container, store at temperatures above 35°F (1.7°C) to avoid solidification. Avoid freezing and temperatures above 120°F (50°C).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: If generation of aerosols is expected, provide mechanical local exhaust ventilation to minimize employee exposure.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use cup type chemical goggles; full-face shield may be used. Maintain eye wash fountain and quick-drench facilities in work area.

RESPIRATORY: For emergencies or instances where the exposure levels are not known, use a full-face positive pressure, air supplied or organic vapor respirator (U.S. NIOSH/MSHA approved).

PROTECTIVE CLOTHING: Wear suitable protective clothing, such as impervious gloves, lab coat, apron or coveralls, as appropriate to protect skin.

GLOVES: Use impervious gloves to protect against skin contact. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Essentially odorless
APPEARANCE:	Colorless to opaque liquid
BOILING POINT:	Not available
COEFFICIENT OF OIL / WATER:	Not available
DENSITY / WEIGHT PER VOLUME:	8.7 lb/gal
EVAPORATION RATE:	Not available
FLASH POINT:	No flash point observed up to 104°C (220°F)
FREEZING POINT:	< 1.65 °C (< 35 °F)
MELTING POINT:	Not available
ODOR THRESHOLD:	Not available
OXIDIZING PROPERTIES:	Not available
PERCENT VOLATILE:	Not available
pH:	5.0 - 7.0
SOLUBILITY IN WATER:	Soluble
SPECIFIC GRAVITY:	Not available
VAPOR PRESSURE:	Not available
VISCOSITY:	<= 50 cP @ 23.65 °C (75°F)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Temperatures below 35°F (1.7°C) to avoid solidification.
STABILITY:	Stable under ordinary use and storage.
POLYMERIZATION:	Will not occur
INCOMPATIBLE MATERIALS:	Compatible with VigorOx peracetic acid, may be incompatible with other oxidizing agents, acids or strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS:	Under fire conditions could form oxides of sulfur, carbon dioxide, carbon monoxide and irritating fumes.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: No data available for the product.

SKIN EFFECTS: No data available for the product.

DERMAL LD₅₀: No data available for the product.

ORAL LD₅₀: No data available for the product.

INHALATION LC₅₀: No data available for the product.

ACUTE EFFECTS FROM OVEREXPOSURE: No data available for the product. Based on the ingredients, this product may be irritating to skin and eyes. Inhalation of vapors or mist may be irritating to the respiratory system.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product. Based on the ingredients, prolonged skin contact may cause dermatitis. Results of genotoxicity tests from the ingredients were negative.

CARCINOGENICITY:

NTP:	Not listed
IARC:	Not listed
OSHA:	Not listed
OTHER:	ACGIH: Not listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: When released into the environment, components of this formulation are expected to readily biodegrade.

ECOTOXICOLOGICAL INFORMATION: No data available for the product. A minor ingredient had LC₅₀ = 1.01 mg/L (96 hr, fathead minnow).

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: None of the components of this formulation are specifically listed as a "Hazardous Waste" in the Federal Regulations. Waste material should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product could change the waste

management options. Dispose of container and unused material in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME:	Not regulated by U.S. DOT
PRIMARY HAZARD CLASS / DIVISION:	Not applicable
UN/NA NUMBER:	N/A
PACKING GROUP:	N/A
LABEL(S):	Not applicable
PLACARD(S):	Not applicable
ADDITIONAL INFORMATION:	DOT Marking: Not applicable Hazardous Substance/RQ: Not listed 49 STCC Number: Not applicable

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

ADDITIONAL INFORMATION:	Not regulated
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INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

ADDITIONAL INFORMATION:	NOTE: Venting of packages is not permitted for air transport.
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OTHER INFORMATION:

N/A = Not applicable

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):

None of the components are listed.

SECTION 311 HAZARD CATEGORIES (40 CFR 370):

For one component: Acute and Chronic Health Hazard

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):

The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.:
None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):

Not listed

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):

None of the components are listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA INVENTORY STATUS (40 CFR 710):

All components listed

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

RCRA IDENTIFICATION OF HAZARDOUS WASTE (40 CFR 261):

Waste Number: Not considered a hazardous waste.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

Not a controlled product under the Canadian Workplace Hazardous Materials Information System (WHMIS).

Domestic Substance List: Listed (components)

16. OTHER INFORMATION

HMIS

Health	1
Flammability	0
Physical Hazard	0
Personal Protection (PPE)	C

Protection = C (Safety glasses, gloves, apron)

HMIS = Hazardous Materials Identification System

Degree of Hazard Code:

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

NEPA

Health	1
Flammability	0
Reactivity	0
Special	

NEPA = National Fire Protection Association

Degree of Hazard Code:

- 4 = Extreme
- 3 = High
- 2 = Moderate
- 1 = Slight
- 0 = Insignificant

REVISION SUMMARY:

New MSDS.

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