
MATERIAL SAFETY DATA SHEET

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Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

ISM-5**MSDS ID: 02451**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ISM-5

Product Descriptor: ALKALINE CLEANER

MANUFACTURER: JOHNSON DIVERSEY, INC.
3630 E. KEMPER ROAD
CINCINNATI, OH. 45241

EMERGENCY PHONE NUMBER: (800)851-7145

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
SODIUM HYDROXIDE	1310-73-2	15 - 30%	TLV-C 2	MG/M3

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CORROSIVE - Contains strong alkali. Causes severe burn to skin and eyes. May be fatal if swallowed. Do not contact eyes, skin or clothing. Wear goggles, face shield, rubber gloves, and protective clothing and boots when handling product. Avoid breathing dust or spray mist. Contain spill or runoff, which may cause environmental damage. Contact with aluminum or soft metals may release flammable hydrogen fumes.

POSSIBLE ROUTES OF ENTRY: Ingestion; Skin contact/absorption; Inhalation**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

ACUTE: **EYES:** Severe burns, tissue damage, or irritation with pain, swelling, blurred or impaired vision, blindness. **SKIN:** Severe burns, tissue destruction, blisters or rash with swelling and pain. **INGESTION:** May be fatal. Severe burns to mouth and throat may result with pain, gastric perforation and difficulty in swallowing or breathing. **INHALATION:** Spray or mists cause burns or severe irritation to nose, throat and respiratory tract with pain, choking, and experience difficulty in breathing.

CHRONIC: Same as acute effects.**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Dermatitis, sensitive skin, pulmonary function and asthma.**TARGET ORGAN(S) OF CHEMICAL HAZARD(S):** Eyes, skin and respiratory tract.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart to completely flush all chemicals from entire eye surface. Get immediate medical attention.

SKIN: Promptly flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and footwear. Launder contaminated clothing and discard or thoroughly clean shoes before reuse. Get medical attention for painful, red or injured skin areas.

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IV. FIRST AID MEASURES (Cont.)

INGESTION: If swallowed, rinse mouth with water. Dilute by drinking several glasses of water. DO NOT induce vomiting. If patient vomits, rerinse mouth. Get immediate medical attention. NOTE: Never give fluids by mouth to an unconscious person.

INHALATION: If inhaled, move to fresh air. If patient is not breathing, give artificial respiration. If breathing is difficult, give oxygen under the direction of trained personnel or a physician. Get immediate medical attention.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): NA **FLAME EXTENSION:** N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: ND UEL: ND
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Liquid produces hydrogen on contact with soft, active metals.
EXTINGUISHING MEDIA: Water spray, CO2, foam or dry powder.
FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus (SCBA) in fire area.
SPECIAL INSTRUCTIONS: Spilled product may cause slippery surface and fall hazard.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:
Contain spill. Wear protective clothing. Soak up or absorb liquid on suitable absorbent material. Collect and place in chemical waste container. Dispose of in accordance with local, State and Federal regulations. Flush spill area with water.
The Reportable Quantity of Sodium Hydroxide - CAS #1310-73-2 is 294 gallons or 3,333 lbs.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: STRONG CAUSTIC PRODUCT. Wear protective gear when using or handling. Product freezes below 50 deg. F. Thaw by warming to 70 deg. F and mix for use. Add product slowly with mixing to water or liquids to avoid heat, steam and spattering. Do not allow product to collect on bottom of tank to prevent violent reaction. Do not pressurize container to empty.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical goggles if contact or splash hazard exists.
PROTECTIVE GLOVES: Alkali resistant.
RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator where TLV/PEL may be exceeded.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: Rubber boots and chemical resistant apron if contact or splash hazard exists.
ENGINEERING CONTROLS:
VENTILATION: Local exhaust ventilation may be necessary to control any air

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

contaminants to within their TLV's during the use of this product.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Dark brown liquid; mild odor.

BOILING POINT (DEG F): 212	FREEZING POINT: ND
SPECIFIC GRAVITY/BULK DENSITY: 1.359	
pH: 14	pH 1% SOLUTION: 12.6
VOLATILE BY VOLUME: 65	
SOLUBILITY IN WATER: Soluble	
VAPOR PRESSURE(mmHg): ND at ND	VAPOR DENSITY: ND

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.
INCOMPATIBILITY WITH OTHER MATERIALS: Corrosive to aluminum and soft metals.
May remove paint and coatings; Acids; Oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of oxygen; oxides of carbon
HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL TESTING: Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

TOXICITY TEST DATA:

Sodium Hydroxide:

Acute Oral LD50 (rat)	500 mg/kg (RTECS)
Acute Skin LD50 (rabbit)	1350 mg/kg (MSI)

XII. ECOLOGICAL INFORMATION

ECOTOXICITY TEST DATA:

No data available.

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: RCRA Regulated Hazardous Waste D002 - Corrosivity Characteristic.

Adjust pH of diluted product and discharge to industrial sewer in accordance with discharge permit or local POTW regulations. Use product in container until empty. Triple rinse container with water and add to process. Recycle or dispose of container according to product labeling or Federal, State or local regulations.

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XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA: All ingredients in this product are on TSCA inventory.

HAPS: Contains no hazardous air pollutants.

VOC CONTENT (EPA Method 24A): % VOC: 0 Lb/Gal VOC: 0

CERCLA/EPCRA:

Section 313 Toxic Chemicals:

None

SARA Section 311/312:

ACUTE: YES CHRONIC: NO FIRE: NO REACTIVITY: NO

SUDDEN RELEASE OF PRESSURE: NO

LISTED CARCINOGEN: NONE

NTP: NO IARC: NO OSHA: NO

HMIS RATINGS: HEALTH: 3 FIRE: 0 REACTIVITY: 1

PERSONAL PROTECTIVE EQUIPMENT: D

NFPA RATING: HEALTH: 3 FIRE: 0 REACTIVITY: 1 SPECIAL: ALKALINE

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS #7732-18-5

SODIUM HYDROXIDE - CAS #1310-73-2

SODIUM GLUCOHEPTONATE - CAS #31138-65-5

NONIONIC SURFACTANT - CAS #68515-73-1

CALIFORNIA PROPOSITION 65:

None of the ingredients are on the California proposition 65 list.

XVI. OTHER INFORMATION

Disclaimer: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other materials or in a process. It is the user's responsibility to evaluate the handling, and use.