
MATERIAL SAFETY DATA SHEET

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

FHH-106**MSDS ID: 02152**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FHH-106

Product Descriptor: DEGREASER/DERUSTER

MANUFACTURER: JOHNSON DIVERSEY, INC.

EMERGENCY PHONE NUMBER: (800) 851-7145

3630 E. KEMPER ROAD

CINCINNATI, OH. 45241

II. HAZARDOUS COMPONENTS

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

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CORROSIVE-Contains strong alkali. Causes severe burns 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 hydrogen gas.

POSSIBLE ROUTES OF ENTRY: Ingestion and 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. Diluted product may cause redness or irritation. **INGESTION:** If swallowed, 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 irritation to nose, throat and respiratory tract with pain, choking, and difficulty in breathing.

CHRONIC: Same as Acute Effects.**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Dermatitis and sensitive skin.**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: Flush thoroughly with plenty of water. Wash with soap and water. Remove contaminated clothes and shoes and clean before reuse. Get medical attention for any painful, red or injured skin.

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

INHALATION: Remove to fresh air. If breathing difficulties arise, get medical

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IV. FIRST AID MEASURES (Cont.)

attention.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F):NONE FLAME EXTENSION: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: N/A UEL: N/A
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. Absorb with sand or clay. Collect material and place in suitable waste container. Neutralize solids and spill area with soda ash or lime. Dispose of by environmental regulations.
The Reportable Quantity (RQ) of Sodium Hydroxide, CAS #1310-73-2 is 255 gallons or 3,125 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: Face shield if contact or splash hazard exists. Eye wash in use area.
PROTECTIVE GLOVES: Alkali resistant.
RESPIRATORY PROTECTION: Respirator protection required if PEL is exceeded. See Section II for information.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: Rubber boots, chemical apron and safety shower in use area if contact or splash hazard exists.
ENGINEERING CONTROLS:
MECHANICAL VENTILATION: Normal room ventilation should be sufficient to control airborne levels.
LOCAL VENTILATION: Not usually required.

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IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, brown liquid with strong alkaline odor.

BOILING POINT (DEG F): 212	FREEZING POINT: ND
SPECIFIC GRAVITY/BULK DENSITY: 1.47	pH: 13.9
pH 1% SOLUTION: 12.7	
VOLATILE BY VOLUME: 50	Weight % solids: 51.14
SOLUBILITY IN WATER: Soluble	
VAPOR PRESSURE(mmHg): 17.5 at 20 C	VAPOR DENSITY: >AIR

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.
INCOMPATIBILITY WITH OTHER MATERIALS: Acids, flammable liquids, organic halogens and soft metal.
HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms oxides of carbon.
HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

Contains Corrosive and Irritating alkaline chemicals. See Section II for amounts and identity. Acute toxicology tests are listed below.
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 DATA: Product and waste are harmful to fish and aquatic forms. Discharge process waste and overflow to a sanitary sewer or on-site treatment process.
ECOTOXICITY TEST DATA: No data available.
ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: Concentrated product would be considered D002- corrosive if declared hazardous waste.
Adjust pH of diluted product and discharge to industrial sewer. Use product in container until empty. Triple rinse container with water and add to process. Recycle or dispose of container by product labeling or governmental regulations.

XIV. TRANSPORT INFORMATION

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

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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:

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: 0

PERSONAL PROTECTIVE EQUIPMENT: D

NFPA RATING: HEALTH: 3 FIRE: 0 REACTIVITY: 0 SPECIAL: CORROSIVE

STATE RIGHT-TO-KNOW INFORMATION:

SODIUM HYDROXIDE CAS#1310-73-2

WATER - CAS #7732-18-5

SODIUM GLUCONATE - CAS #527-07-1

ALKYL POLYGLUCOSIDE 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 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 applicability of this information for his particular conditions of storage, handling, and use.