
MATERIAL SAFETY DATA SHEET

Page 1 of 4
Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

DIVOS 110**MSDS ID: 00250**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DIVOS 110

Product Descriptor: ALKALINE RO CLEANER

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
POTASSIUM HYDROXIDE	1310-58-3	5 - 15%	TWA - 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: Skin contact/absorption**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:** Burns or irritation to mouth, throat with pain, nausea and vomiting. **INHALATION:** Spray or mist causes severe irritation with pain, choking, and breathing difficulty.

CHRONIC: Same as acute effects.**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Dermatitis or 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: 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.

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

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Page 2 of 4
Revised 2/02/04
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MSDS ID: 00250

IV. FIRST AID MEASURES (Cont.)

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: None known.
EXTINGUISHING MEDIA: Water, 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 (RQ) of Potassium Hydroxide, CAS #1310-58-3 is 997 gallons or 10,000 lbs.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Store in a cool, dry area, keep away from acids. Keep container closed when not in use. Wear protective gear when handling or using. Do not pressurize container to empty.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Face shields.
PROTECTIVE GLOVES: Alkali resistant.
RESPIRATORY PROTECTION: Not normally required.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: Rubber boots and chemical resistant apron if contact or splash hazard exists. Eyewash and safety shower in area if contact or splash hazard exists.
ENGINEERING CONTROLS:
VENTILATION: Good general ventilation should be sufficient to control airborne levels.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Pale yellow liquid.

BOILING POINT (DEG F): ND
SPECIFIC GRAVITY/BULK DENSITY: 1.202
pH: >13.0
VOLATILE BY VOLUME: 77%
SOLUBILITY IN WATER: Soluble

FREEZING POINT: ND
pH 1% SOLUTION: 11.25

MATERIAL SAFETY DATA SHEET

Page 3 of 4
Revised 2/02/04
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DIVOS 110

MSDS ID: 00250

IX. PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

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

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of carbon; oxides of oxygen; oxides of phosphorus

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Available toxicology test data for the product as listed below.

TOXICITY TEST DATA:

Potassium Hydroxide:

Acute Oral LD50 (rat) - 365 mg/kg (RTECS)

Acute Skin LD50 (rabbit) - 1260 mg/kg (MSI)

XII. ECOLOGICAL INFORMATION

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 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.

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: None

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

CERCLA/EPCRA:

Section 313 Toxic Chemicals:

None

MATERIAL SAFETY DATA SHEET

Page 4 of 4
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XV. REGULATORY INFORMATION (Cont.)

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: Alkaline

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS #7732-18-5

POTASSIUM HYDROXIDE - CAS #1310-58-3

POTASSIUM TRIPOLYPHOSPHATE - CAS #13845-36-8

ANIONIC SURFACTANT - CAS #36445-71-3 AND 70146-13-3

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.