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**MATERIAL SAFETY DATA SHEET**

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

**SULFURIC ACID 50%****MSDS ID: 05550**

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**I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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Product Name: SULFURIC ACID 50%

Product Descriptor: ACID

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

EMERGENCY PHONE NUMBER: (800)851-7145

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**II. HAZARDOUS COMPONENTS**

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| Component Name | CAS Number | %    | Exposure Limits | Units |
|----------------|------------|------|-----------------|-------|
| SULFURIC ACID  | 7664-93-9  | >30% | TWA 1           | MG/M3 |

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**III. HAZARDS IDENTIFICATION**

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**EMERGENCY OVERVIEW:**

**CORROSIVE** - Contains strong acids. 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.

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**IV. FIRST AID MEASURES**

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**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 steel or 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 (RQ) of Sulfuric Acid, CAS #7664-93-9 is 172 gallons or 2,010 lbs.

**VII. HANDLING AND STORAGE**

**HANDLING AND STORAGE PRECAUTIONS:** Keep container closed. If frozen, thaw and mix to make usable. Do not pressure container to empty. Keep away from alkalis and chlorinated products.

**VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EYE/FACE PROTECTION:** Face shields.

**PROTECTIVE GLOVES:** Acid 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 contaminants to within their TLV's during the use of this product.

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**IX. PHYSICAL AND CHEMICAL PROPERTIES**

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APPEARANCE AND ODOR: Clear liquid; pungent odor.

|                                      |                     |
|--------------------------------------|---------------------|
| BOILING POINT (DEG F): 210           | FREEZING POINT: ND  |
| SPECIFIC GRAVITY/BULK DENSITY: 1.398 |                     |
| pH: 1.0                              | pH 1% SOLUTION: 1.0 |
| VOLATILE BY VOLUME: 50               |                     |
| SOLUBILITY IN WATER: Soluble         |                     |
| VAPOR PRESSURE(mmHg): ND             | at ND               |
|                                      | VAPOR DENSITY: ND   |

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**X. STABILITY AND REACTIVITY**

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CHEMICAL STABILITY: Product stable.  
INCOMPATIBILITY WITH OTHER MATERIALS: Corrosive to aluminum and soft metals.  
May remove paint and coatings; Carbonates; Oxidizing agents; Soft metals;  
Chlorine and chlorinated compounds; Alkalies; Water; Reducing agents  
HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of  
sulfur; phosgene; oxides of oxygen  
HAZARDOUS POLYMERIZATION: None known.

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**XI. TOXICOLOGICAL INFORMATION**

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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:

Sulfuric Acid:

Acute Oral LD50 (rat) - 2140 mg/kg (RTECS)

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**XII. ECOLOGICAL INFORMATION**

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ECOTOXICITY TEST DATA:

No data available.

ENVIRONMENTAL FATE: No data available.

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**XIII. DISPOSAL CONSIDERATIONS**

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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**

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

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**XV. REGULATORY INFORMATION**

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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: ND Lb/Gal VOC: ND

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: Acid

STATE RIGHT-TO-KNOW INFORMATION:

SULFURIC ACID - CAS #7664-93-9

WATER - CAS #7732-18-5

CALIFORNIA PROPOSITION 65:

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

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**XVI. OTHER INFORMATION**

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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.