
MATERIAL SAFETY DATA SHEET

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

SUMA CALC D5**MSDS ID: 57236280**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SUMA CALC D5

Product Descriptor: DESCALER

MANUFACTURER: JOHNSON DIVERSEY, INC.
3630 E. KEMPER ROAD
CINCINNATI, OH. 45241EMERGENCY PHONE NUMBER: (800) 851-7145

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
NITRIC ACID	7697-37-2	5 - 15%	TLV 5.2 STEL 10	MG/M3
PHOSPHORIC ACID	7664-38-2	15 - 30%	TWA 1 STEL 3	MG/M3

III. HAZARDS IDENTIFICATION

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 or sensitive skin.**TARGET ORGAN(S) OF CHEMICAL HAZARD(S):** Eyes, skin, mouth and esophagus.

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 mild 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. Get immediate medical attention. **NOTE:** Never

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IV. FIRST AID MEASURES (Cont.)

give fluids by mouth to an unconscious person.
INHALATION: Remove to fresh air and seek medical 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: 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: None required.

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 NITRIC ACID, CAS #7697-37-2 IS 776.40 GALLONS OR 869.45 LBS. THE REPORTABLE QUANTITY (RQ) OF PHOSPHORIC ACID, CAS #7664-38-2 IS 2100.8 GALLONS OR 2,352.9 LBS.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: CONTAINS NITRIC ACID. Dilute product only with water or by label directions. Keep container closed when not in use. Wear protective gear when using or handling product. Do not mix with oils, detergents or chlorinated cleaners. Toxic or irritating gasses may be released. Do not pressurize container to empty. Contamination of combustibles such as wood, paper, or oily rags may cause fire.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical goggles if contact or splash hazard exists.
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. Eyewash and safety shower in area if contact or splash hazard exists.
ENGINEERING CONTROLS:
VENTILATION: None required.

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IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Red clear liquid, acid note.

BOILING POINT (DEG F): 215F	FREEZING POINT: N/D
SPECIFIC GRAVITY/BULK DENSITY: 1.12	
pH: 1.5	pH 1% SOLUTION: N/A
VOLATILE BY VOLUME: N/A	
SOLUBILITY IN WATER: Soluble	
VAPOR PRESSURE(mmHg): N/A at N/A	VAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.
INCOMPATIBILITY WITH OTHER MATERIALS: Alkalis; Soft metals
HAZARDOUS DECOMPOSITION PRODUCTS: oxides of phosphorus; oxides of nitrogen
HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No data available.
TOXICITY TEST DATA:
No data available.

XII. ECOLOGICAL INFORMATION

ECOTOXICITY TEST DATA:
No data available.
ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: Not Regulated.
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: N/A Lb/Gal VOC: N/A
CERCLA/EPCRA:
Section 313 Toxic Chemicals:

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XV. REGULATORY INFORMATION (Cont.)

None

SARA Section 311/312:

ACUTE:NO 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: C

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

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS #7732-18-5

NONIONIC SURFACTANT - CAS #9003-11-6

UREA - CAS #57-13-6

PHOSPHORIC ACID - CAS #7664-38-2

NITRIC ACID - CAS #7697-37-2

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.