
MATERIAL SAFETY DATA SHEET

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

ZINK ON #5**MSDS ID: 04695**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ZINK ON #5

Product Descriptor: ZINC PHOSPHATIZING AGENT

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
NICKEL NITRATE	13138-45-9	1 - 5%	TWA 0.1 (soluble compound)	MG/M3
NITRIC ACID	7697-37-2	5 - 15%	TLV 5.2 STEL 10	MG/M3
PHOSPHORIC ACID	7664-38-2	5 - 15%	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: All Routes of Entry/Exposure

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, respiratory tract, and gastrointestinal tract.

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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: 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): NONE FLAME EXTENSION: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: NONE UEL: NONE
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Toxic fumes or vapor may form during fire. Liquid produces hydrogen on contact with steel or active metals.
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.
This product does not contain a reportable quantity (RQ) under CERCLA.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Store in a cool, dry area. Keep from freezing. Keep away from alkalis and chlorinated products. Do not pressurize container to empty.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Safety glasses with side shields. Face shields.
PROTECTIVE GLOVES: Acid resistant.
RESPIRATORY PROTECTION: Product does not have any established exposure limits. NIOSH/MSHA approved respirator recommended in enclosed or confined spaces

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

where high air concentration or long exposure may occur.

OTHER PROTECTIVE CLOTHING/EQUIPMENT: Rubber boots and chemical resistant apron 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: Clear, green liquid, no odor.

BOILING POINT (DEG F): 200

FREEZING POINT: 0 C

SPECIFIC GRAVITY/BULK DENSITY: 1.418

pH: <1

pH 1% SOLUTION: N/D

VOLATILE BY VOLUME: 60

SOLUBILITY IN WATER: Soluble

VAPOR PRESSURE(mmHg): 17.5 at 20 C

VAPOR DENSITY: 17.3

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Alkalies

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of nitrogen; oxides of phosphorus; oxides of zinc

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:

Phosphoric Acid:

Acute Oral LD50 (rat) - 1530 mg/kg (RTECS)

Acute Skin LD50 (rabbit) - 2740 mg/kg (RTECS)

Nitric Acid:

Acute Oral LDLO (man) - 430 mg/kg (MSI)

XII. ECOLOGICAL INFORMATION

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

ECOTOXICITY TEST DATA:

Phosphoric Acid:

TLm (48-96 hr.) (Gambusia affinis) 138 mg/l

Nitric Acid:

LC50 (48 hr.) (Carcinus maena) 180 mg/l

LC50 (48 hr.) (Dinocardium robustum) 1000 mg/l

LC50 (48 hr.) (Asterias forbosi) 100-300 mg/l

ENVIRONMENTAL FATE: No data available.

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XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: CONCENTRATED PRODUCT WOULD BE CONSIDERED D002-CORROSIVE, IF DECLARED HAZARDOUS WASTE.

Spent or excess product is hazardous waste. Do not discharge to sewer or environment. Arrange disposal through a licensed disposal company or treat by special Waste Disposal Sheet. Recycle or dispose of containers by product labeling or governmental 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:

ZINK ON #5 CONTAINS: PHOSPHORIC ACID @12.3%,
NITRIC ACID @11%, NICKEL NITRATE @4% WHICH IS
REPORTABLE AS A NICKEL COMPOUND, AND ZINC PHOSPHATE @11%
WHICH IS REPORTABLE AS A ZINC COMPOUND.

SARA Section 311/312:

ACUTE: YES CHRONIC: NO FIRE: NO REACTIVITY: NO
SUDDEN RELEASE OF PRESSURE: NO

LISTED CARCINOGEN: YES, Nickel Nitrate

NTP: NO IARC: YES OSHA: NO

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

PERSONAL PROTECTIVE EQUIPMENT: D

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

STATE RIGHT-TO-KNOW INFORMATION:

PHOSPHORIC ACID - CAS #7664-38-2

ZINC PHOSPHATE - CAS #7779-90-0

NICKEL NITRATE - CAS #13138-45-9

AMMONIUM BIFLUORIDE - CAS #1341-49-7

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.