MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

PRODUCT NAME: Dissolved Oxygen 3 Reagent Powder Pillows
CAS NO.: 5529-14-6
FORMULA: HNO3 OH4
CHEMICAL NAME: Sulfamic Acid
CHEMICAL FAMILY: Inorganic Acids

II. INGREDIENTS

Sulfamic Acid
PCT: <10 PEL: Not established
TML: Not established HAZARD: Causes eye burns; moderately toxic

Other component
PCT: <1 PEL: Not applicable
TML: Not applicable
HAZARD: Not applicable

Any component of this mixture not specifically listed (e.g. "other components") is not considered to present a carcinogenic hazard.

III. PHYSICAL DATA

STATE: solid APPEARANCE: White crystalline powder ODOR: None
SOLUBILITY IN: WATER: Soluble ACID: Soluble
OTHER: Slightly soluble in acetic, methanol BOILING PT.: 290°C SPECIFIC GRAVITY: 1.18
MELTING PT.: 29°C SPECIFIC VAPOR PRESSURE: Not determined VAPOR DENSITY (air=1): NA
EVAPORATION RATE: NA METAL CORROSIVITY - ALUMINUM: 0.312 in/yr
STEEL: 0.314 in/yr STABILITY: See Conditions to Avoid
STORAGE PRECAUTIONS: Store tightly closed in a dry place.

IV. FIRE, EXPLOSION HAZARD AND REACTIVITY DATA

FLASH PT.: Not applicable METHOD: NA
FLAMMABILITY LIMITS: LOWER: NA UPPER: NA
SUSCEPTIBILITY TO SPONTANEOUS HEATING: None
SHOCK SENSITIVITY: None AUTOIGNITION PT.: ND
EXTINGUISHING MEDIA: water or dry chemical
FIRE EXPLOSION HAZARDS: Reacts violently with chlorine, fuming nitric acid;
may emit toxic fumes in fire
HAZARDOUS DECOMP. PRODUCTS: May emit toxic fumes of sulfur oxides, nitrogen oxides in fire
OXIDIZER: No NFPA Codes: Health: 2 Flammability: 1 Reactivity: 1
CONDITIONS TO AVOID: Contact with chlorine or fuming nitric acid; extreme heat or flame; excess moisture

V. HEALTH HAZARD DATA

THIS PRODUCT MAY BE: corrosive to eyes, irritating to skin and respiratory tract.

ACUTE TOXICITY: Oral rat LD50 = 3140 mg/Kg, Moderately toxic
ROUTES OF EXPOSURE: Ingestion, inhalation
TARGET ORGANS: Not determined
CHRONIC TOXICITY: Not determined
ROUTES OF EXPOSURE: Not determined
TARGET ORGANS: Not determined
CANCER INFORMATION: Not applicable
ROUTES OF EXPOSURE: Not applicable
TARGET ORGANS: Not applicable
OVEREXPOSURE: Causes eye burns. May cause skin and respiratory tract irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing eye, skin and respiratory tract conditions.

VI. PRECAUTIONARY MEASURES

Avoid contact with eyes, skin and clothing.
Do not breathe dust.
Wash thoroughly after handling.
Keep away from heat, sparks and open flame.
PROTECTIVE EQUIPMENT: Ventilation, lab grade goggles, rubber gloves, lab coat

VII. FIRST AID

EYE AND SKIN CONTACT: Immediately flush eyes and skin with water for 15 minutes. Remove contaminated clothing. Call physician.
INGESTION: Do not induce vomiting. Give 1 - 2 glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.
INHALATION: Remove to fresh air.

VIII. SPILL AND DISPOSAL PROCEDURES

IN CASE OF SPILL OR RELEASE: Cover contaminated surfaces with sodium bicarbonate. Mix and add water if necessary. Use thick paper to make sure pH of slurry is neutral or add neutralizer until mixture stops bubbling. Scoop up the slurry and wash the neutral waste down the drain with excess water. Wash the site with sodium ash solution.
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

IX. TRANSPORTATION DATA

D.O.T. PROPER SHIPPING NAME: Corrosive Solid, N.O.S.
HAZARD CLASS: Corrosive Material ID: UN1759
I.C.A.O. PROPER SHIPPING NAME: Sulfamic Acid Mixture
HAZARD CLASS: I ID: UN2947 GROUP: III
I.M.O. PROPER SHIPPING NAME: Sulfamic Acid Mixture
HAZARD CLASS: I ID: UN2947 GROUP: III

X. REFERENCES

3) In-house judgment
4) Technical judgment
6) Outside testing.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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Hach Company, WORLD HEADQUARTERS, PO Box 569, Loveland, CO 80539
Hach Europe, BP 229, 35000 Namur 1, BELGIUM

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