

14119

## MATERIAL SAFETY DATA SHEET

For Assistance, Contact:  
Regulatory Affairs Dept.  
PO Box 907 Ames, IA

HACH COMPANY  
PO BOX 907  
AMES, IA 50010

Emergency Telephone #  
(515) 232-2533

## I. PRODUCT IDENTIFICATION

CATALOG NUMBER: 14119 PRODUCT NAME: NitraVer<sup>®</sup> & Nitrate Reagent  
CAS. NO: NA CHEMICAL NAME: Not applicable  
FORMULA: Not applicable DATE: 06/29/87  
CHEMICAL FAMILY: Not applicable CHANGE NO.: 6617

## II. INGREDIENTS

INGREDIENTS	I	CAS NUMBER	TLV	PEL	NATURE OF HAZARD
CDTA Trisodium Salt	<15	36679-96-6	Not established	Not established	Toxicity unknown; may cause irritation
Cadmium Metal Powder	<10	7440-43-9	0.05 mg/M3	0.2 mg/M3 dust	Very toxic by inhalation; suspected carcinogen
Sodium Sulfate, Anhydrous	<30	7757-82-6	Not established	Not established	May cause irritation
Tartaric Acid	<25	87-69-4	Not established	Not established	Moderately toxic; may cause irritation
Magnesium Sulfate Heptahydrate	<10	7487-88-9	Not established	Not established	Moderately toxic; may cause irritation
Sodium Tartrate	<25	868-18-8	Not established	Not established	Moderately toxic; may cause irritation

## III. PHYSICAL DATA

STATE: solid | APPEARANCE: Blue metallic powder | ODDR: None  
SOLUBILITY IN: WATER: Soluble | ACID: Not determined | OTHER: Not determined  
BOILING PT.: NA | MELTING PT.: ND | SPECIFIC GRAVITY: ND | pH: 3.40  
VAPOR PRESSURE: Not applicable | VAPOR DENSITY (air=1): NA | EVAPORATION RATE: NA  
METAL CORROSIVITY - ALUMINUM: ND | STEEL: ND | STABILITY: See Conditions to Avoid  
STORAGE PRECAUTIONS: Store tightly closed in a cool, 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, carbon dioxide, or dry chemical  
FIRE/EXPLOSION HAZARDS: May emit toxic fumes in fire  
HAZARDOUS DECOMP. PRODUCTS: May emit toxic fumes of cadmium oxide, nitrogen oxides and sulfur oxides in fire  
OXIDIZER: No | NFPA Codes Health: 3 | Flammability: 1 | Reactivity: 1  
CONDITIONS TO AVOID: Unnecessary exposure to moisture. Avoid creation of dust.

## V. HEALTH HAZARD DATA

THIS PRODUCT MAY BE irritating to eyes, skin and respiratory tract.  
ACUTE TOXICITY: Moderately toxic  
ROUTES OF EXPOSURE: ingestion, inhalation  
TARGET ORGANS: central nervous system, gastrointestinal and respiratory tracts, liver, spleen  
CHRONIC TOXICITY: Danger of cumulative effects  
ROUTES OF EXPOSURE: inhalation  
TARGET ORGANS: lungs  
CARCINOGEN, MUTAGEN, TERATOGEN DATA: suspected carcinogen  
ROUTES OF EXPOSURE: inhalation  
TARGET ORGANS: Not determined  
OVEREXPOSURE: Irritation, shortness of breath, chest pain, weakness, leg pains, destruction of lung tissue, liver and kidney damage

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Hach Company, WORLD HEADQUARTERS, PO Box 389, Loveland, CO 80539  
Hach Europe, BP 51, 85000 Namur 1, Belgium

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory conditions, liver or kidney disease

#### VI. PRECAUTIONARY MEASURES

Protect from moisture.  
Wash thoroughly after handling.  
Avoid contact with eyes, skin and clothing.  
Do not breathe chemicals.

PROTECTIVE EQUIPMENT: fume hood, disposable gloves, safety glasses, lab coat

#### VII. FIRST AID

EYE AND SKIN CONTACT: Immediately flush eyes with water for 15 minutes. Call physician. Wash skin with soap and plenty of water.

INGESTION: Administer milk or beaten egg whites at frequent intervals. Induce vomiting. Never give anything by mouth to an unconscious person. Call physician.

INHALATION: Remove to fresh air. Give artificial respiration if necessary. Call physician.

#### VIII. SPILL AND DISPOSAL PROCEDURES

IN CASE OF SPILL OR RELEASE: Dispose of in an EPA Approved landfill.  
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

#### IX. TRANSPORTATION DATA

PROPER SHIPPING NAME: Not Currently Regulated

HAZARD CLASS: Not applicable | ID: NA

#### X. REFERENCES

- 1) IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, World Health Organization (Volumes 1-29) Supplement 4, October 1982, France.
- 2) Fourth Annual Report on Carcinogens, 1983. National Toxicology Program Public Information Office NTP 85-002.
- 3) TLV's Threshold Limit Values for Chemical Substances in the Work Environment Adopted by ACGIH for 1986-1987. Cincinnati, 1986.
- 4) 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor)
- 5) Outside testing.
- 6) In-house information
- 7) Technical judgement

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