

CHEMETRICS INC -- R-5511, CHLORINE CHEMETS, ULR CHEMETS, VACUETTES AND(SUPDAT) --
6640-01-462-5692

===== Product Identification =====

Product ID:R-5511, CHLORINE CHEMETS, ULR CHEMETS, VACUETTES AND(SUPDAT)

MSDS Date:02/01/1999

FSC:6640

NIIN:01-462-5692

MSDS Number: CJRKT

=== Responsible Party ===

Company Name:CHEMETRICS INC

Address:ROUTE 28

City:CALVERTON

State:VA

ZIP:20138

Country:US

Info Phone N

um:800-356-3072; 540-788-9026

Emergency Phone Num:703-590-9204; 540-439-3860

CAGE:7K791

=== Contractor Identification ===

Company Name:CHEMETRICS INC

Address:ROUTE 28

Box:City:CALVERTON

State:VA

ZIP:22016

Country:US

Phone:800-356-3072; 540-788-9026

CAGE:7K791

===== Composition/Information on Ingredients =====

Ingred Name:FORMALDEHYDE SOLUTION, 37%

CAS:50-00-0

RTECS #:LP8925000

< Wt:.2

OSHA PEL:3 PPM, C

ACGIH TLV:2 PPM, C

ACGIH STEL:C0.37 MG/M3;C0.3 PPM

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

Ingred Name:PHOSPHORIC AICD, MONOPOTASSIUM SALT; (POTASSIUM PHOSPHATE MONOBASIC)

CAS:7778-77-0

RTECS #:TC6615500

= Wt:2.

Ingred Name:METHANOL

CAS:67-56-1

RTECS #:PC1400000

= Wt:4.

OSHA PEL:260 MG/M3;200 PPM

ACGIH TLV:262 MG/M3;200 PPM

ACGIH STEL:328 MG/M3;250 PPM

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:WATER; (DEIONIZED WATER)

CAS:7732-18-5

RTECS #:ZC0110000

> Wt:93.

Ingred Name:OTHER COMPONENTS

< Wt:1.

===== Hazards Identification
n =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:ACUTE: IRRITATION. CHRONIC: IRRITATION AND SENSITIZATION DERMATITIS.

Explanation of Carcinogenicity:FORMALDEHYDE: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 62, PG 217, 1995: GROUP 2A. NTP 8TH ANNUAL REPORT ON CARCINOGENS, 1994: ANTICIPATD TO BE CARCINOGEN. ANIMAL: N ASAL TUMO

RS. OSHA REGULATED:
29 CFR 1910.1048.

Effects of Overexposure:SEE HEALTH HAZARDS.

Medical Cond Aggravated by Exposure:MAY CAUSE IRRITATION TO EYES, SKIN AND MUCOUS MEMBRANES.

===== First Aid Measures =====

First Aid:EYES: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SKIN:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. INGESTION: SEEK MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR.

===== Fire Fighting Measures ==

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Extinguishing Media: DRY CHEMICAL OR CARBON DIOXIDE.
Fire Fighting Procedures: USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT .
Unusual Fire/Explosion Hazard: NFPA RATINGS: HEALTH - 1; FLAMMABILITY - 0; REACTIVITY - 0.

===== Accidental Release Measures =====

Spill Release Procedures: TAKE UP WITH ABSORBENT MATERIAL. PLACE IN SMALL CONTAINERS FOR DISPOSAL.

===== Handling and Storage =====

Handling and Storage Precautions: PRODUCT SHOULD BE STORED IN THE DARK AND AT ROOM TEMPERATURE; HOWEVER, TEMPERATURES UP TO 120F OR EVEN BELOW FREEZING WILL NOT NORMALLY AFFECT REAGENT PERFORMANCE. AVOID CONTACT WITH EYES. FRAGILE: LIQUID IN GLASS. HANDLE WITH CARE.
Other Precautions: ALWAYS WEAR EYE PROTECTION WHEN WORKING WITH THESE AMPOULES. WARNING: DO NOT BREAK TIP OF AMPOULE UNLESS IT IS COMPLETELY IMMERSSED IN YOUR SAMPLE. BREAKING TIP IN AIR MAY CAUSE GLASS AMPOULE TO SHATTER . IF THIS PRODUCT IS USED AS DIRECTED, THE USER WILL NOT COME IN CONTACT WITH OR BE EXPOSED TO ANY OF ITS CHEMICAL COMPONENTS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection: NIOSH APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN .
Protective Gloves: IMPERMEABLE GLOVES .
Eye Protection: ANSI APPROVED CHEMICAL WORKERS GOGGLES .
Other Protective Equipment: EYE WASH & DELUGE SHOWER MEETING ANSI DESIGN CRITERIA .
Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING.
Supplemental Safety and Health
MFR'S TRADE NAME/PART NO: VACU-VIALS. MFR INFO: FAX # (540) 788-4856 - E-MAIL TECHINFO @ CHEMETRICS COM.

===== Physical/Chemical Properties =====

Boiling Pt: =95.C, 203.F
Melt/Freeze Pt: =0.C, 32.F
Spec Gravity: 1 (H₂O=1)
pH: 4
Solubility in Water: COMPLETE
Appearance and Odor: COLORLESS LIQUID; NO ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to

Avoid: YES

Hazardous Decomposition Products: NONE.

===== Toxicological Information =====

Toxicological Information: ANIMAL TOXICOLOGY: TEST FOR DOT HAZARD CLASSIFICATION: TEST ON NA2O X-TYPE SIEVES GAVE THE FOLLOWING RESULTS: 1-HOUR LC50 (RAT) > 2.8 MG/L. 48-HOUR DERMAL LD50 (RABBIT) EST. > 2,000 MG/KG. NOT CONSIDERED AN OCULAR IRRITANT. TESTS FOR FDA APPROVAL FOR USE IN FOODS: NOT A FOOD-GRADE PRODUCT. HUMAN TOXICOLOGY: MOLECULAR SIEVES ARE NON-FIBROUS, SYNTHETIC AMHUMAN SILICATES (ZEOLITES) NOT TO BE CONFUSED WITH NATURAL ZEOLITES. ALL STUDIES TO DATE INDICATE THAT THEY DO NOT CAUSE SIGNIFICANT HEALTH PROBLEMS.

===== Ecological Information =====

Ecological: NOT KNOWN TO HAVE ANY ADVERSE EFFECT ON THE AQUATIC ENVIRONMENT WHEN PROPERLY DISPOSED. INSOLUBLE AND NONTOXIC.

===== Disposal Considerations =====

Waste Disposal Methods: DISPOSE OF I/A/W ALL FEDERAL, STATE AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information: DOT: NOT CLASSIFIED AS A HAZARDOUS MATERIAL.

===== Regulatory Information =====

SARA Title III Information: EPA-THIS PRODUCT CONTAINS NO TOXIC CHEMICALS IN EXCESS OF THE APPLICABLE DE MINIMIS CONCENTRATIONS AS SPECIFIED UNDER 313 OF TITLE III SARA.

Federal Regulatory Information: TSCA: EPA HAS DEFINED ZEOLITES AS COMPLEX PRODUCTS CONSISTING OF SILICA (SiO₂) AND ALUMINA (Al₂O₃), IN VARIOUS PROPORTIONS PLUS METALLIC OXIDES AND CERTAIN CATIONS. FOR PURPOSES OF TSCA, ZEOLITES ARE STATUTORY MIXTURES. OSHA-PEL: MOLECULAR SIEVE-NOT LISTED IN 29 CFR 1910.1000. USDA--NOT APPLICABLE. FDA--NOT APPLICABLE.

===== Other Information =====

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particular situation.