

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

Num: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.

=====
on =====

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: ANTICIPATED TO BE CARCINOGEN. ANIMAL: NASAL TUM

ORS. 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 =

=====
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: IMPERVIOUS 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 NA20 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 AHUMANSILICATES (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 PR

ODUCTS 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 =====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Depart

ment

of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.