

ORION MATERIAL SAFETY DATA SHEET

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I. PRODUCT INFORMATION

PRODUCT NAME:  
94 SERIES IONIC STRENGTH ADJUSTOR 5 M NA NO3.

CATALOG NO.: 940009/940011  
EFFECTIVE DATE: 3/15/91

HAZARDOUS SHIPMENT LABELING: DOT-OXIDIZER IATA-OXIDIZER

PREPARED BY: THOMAS F. FLYNN TITLE: QUALITY ASSURANCE CHEMIST  
APPROVED BY: LYNN ORLOWITZ TITLE: DIRECTOR REGULATORY MATTERS

II. HAZARDOUS INGREDIENTS (IDENTITY INFORMATION)

HAZARDOUS COMPONENTS*	CAS NO.	%	OSHA PEL	ACGIH TLV	LD LO MG/KG
SODIUM NITRATE	7631-99-4	42.5	NONE	NONE	913 (ORL-RAT)
** DEIONIZED WATER (H2O)	7732-18-5	57.5	NONE	NONE	929 (ORL-RAT)

\* CHEMICALS WHICH ARE NOT CLASSIFIED AS HAZARDOUS PER U.S. OSHA GUIDELINES (29CFR PARTS 1915.2 OR 1916.2) OR THE MASSACHUSETTS SUBSTANCE LIST (105CMR670.000 APPENDIX A) WILL NOT NECESSARILY BE LISTED ON THIS FORM EVEN THOUGH ONE OR MORE MAY BE A CONSTITUENT OF THIS PRODUCT.

\* NA NOT AVAILABLE OR NOT APPLICABLE.

\*\* NON-HAZARDOUS COMPONENT.

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III. PHYSICAL DATA

BOILING POINT (760 MM HG): 100 C  
SPECIFIC GRAVITY (H2O = 1): 1.1  
PH @ 25 C: (5.5 - 7.5)  
VOLATILES, % BY WT.: NA  
VAPOR DENSITY (AIR = 1): NA  
APPEARANCE AND ODOR: COLORLESS, ODORLESS LIQUID.  
FREEZING POINT: -4 C  
VAPOR PRESSURE @: NA  
SOLUBILITY IN WATER, % BY WT. @: MISCIBLE  
EVAPORATION RATE (BUTYL, ACETATE = 1): NA

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (TEST METHOD): NA\*  
AUTOIGNITION TEMPERATURE: NA

FLAMMABLE LIMITS IN AIR, % BY VOLUME: LOWER-NA UPPER-NA  
EXTINGUISHING MEDIA: ANY  
SPECIAL FIRE-FIGHTING PROCEDURES: NA  
UNUSUAL FIRE AND EXPLOSION HAZARDS:  
NITRATE MAY RENDER OTHER MATERIALS MORE COMBUSTIBLE IF ALLOWED TO DRY OUT UPON THEM.

V. REACTIVITY DATA

STABILITY: STABLE  
CONDITIONS TO AVOID:  
STORING NEAR HEAT OR INCOMPATIBLE CHEMICALS.

INCOMPATIBILITY (MATERIALS TO AVOID):  
REDUCING AGENTS, B, BAS, NA ACETATE, TI, S, TRICHLOROETHYLENE, CHARCOAL.

HAZARDOUS DECOMPOSITION PRODUCTS:  
OXIDES OF NITROGEN UPON HEATING TO DECOMPOSITION.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.  
CONDITION TO AVOID: NA

VI. HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: INHALATION?-NO SKIN?-NO INGESTION?-YES

HEALTH HAZARDS (ACUTE AND CHRONIC):  
ACUTE: LARGE AMOUNTS TAKEN INTERNALLY MAY BE FATAL OR CAUSE DIZZINESS, CRAMPS, CONVULSIONS, VOMITING, WEAKNESS, AND COLLAPSE. CHRONIC: CAN CAUSE ANEMIA, NEPHRITIS, AND METHEMOGLOBINEMIA.

CARCINOGENICITY: NTP? IARC MONOGRAPHS? OSHA REGULATED?  
NOT FOUND ON THESE LISTS.

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SIGNS AND SYMPTOMS OF EXPOSURE:  
DIZZINESS, NAUSEA, WEAKNESS; NO SERIOUS ACUTE OR CHRONIC EFFECTS WITH EITHER EXTERNAL OR INHALATION EXPOSURE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:  
KIDNEY OR HEART PROBLEMS.

EMERGENCY AND FIRST AID PROCEDURES:  
SKIN AND EYES: WASH OFF WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.  
INTERNAL: INDUCE VOMITING. CONSULT PHYSICIAN.

VII. PRECAUTIONS (SAFE HANDLING AND USE)

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:  
DILUTE WITH WATER; VACUUM UP AND SET ASIDE FOR WASTE DISPOSAL.

WASTE DISPOSAL METHOD:  
CONSULT WITH AND OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS WHEN DISPOSING OF THIS PRODUCT.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:  
STORE AT ROOM TEMPERATURE AND KEEP CAP TIGHTLY SEALED TO PROTECT PRODUCT INTEGRITY. NFPA RATING: SCALE (0-4); HEALTH-2, FIRE-1, REACTIVITY-0, SPECIFIC-NONE.

OTHER PRECAUTIONS:  
NOTE: SODIUM NITRATE IS LISTED IN TABLE 172.101 OF TITLE 49CFR. THIS PRODUCT IS NOT REGULATED BY CAL. PROP. 65.

VIII. CONTROL MEASURES

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RESPIRATORY PROTECTION (SPECIFY TYPE): NA

VENTILATION:

LOCAL EXHAUST-NA

MECHANICAL (GENERAL)-NA

SPECIAL-NA

OTHER-NA

PROTECTIVE GLOVES: NONE

EYE PROTECTION: SAFETY GLASSES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NONE

WORK/HYGIENIC PRACTICES:

EMERGENCY EYE WASH SHOULD BE AVAILABLE.

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