MARCH 14, 1997

RUPERT GIBBON & SPIDER, INC.

P.O. Box 425 Healdsburg, California 95448 SODA ASH

ORDER NO: 217535814 04621203 PROD NO:

VAN WATERS & RUGERS INC. 1600 HURTON BLDG. SEATTLE, WA 78104-1564

----EMERGENCY ASSISTANCE-----

- 50 C FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL CHEMTREC (800) 424-9300.

CONTACT YOUR LOCAL VAN WATERS & ROGERS BRANCH OFFICE

----PRODUCT IDENTIFICATION-----

PRODUCT NAME: SODA ASH COMMON NAMES/SYNONYMS: SODIUM CARROMATE, ANHYDROUS

CAS NO.

CAS NO.: 497-19-8

VWER CODE: T1120

FORMULA: NAR COS HAZARD RATING (MANUFACTURER)

HEALTH: 2 FIRE: 0

COMPONENT

REACTIVITY: 0 BPECIAL: NONE

DATE ISSUED: 11/94 SUPERCEDES: NONE HAZARD RATING SCALE: 3=SERIOUS O=NINIMAL 1=BLIGHT 4=SEVERE 2=MODERATE

EXPOSURE LIMITS, PPM

DSHA ACGIH DTHER

MONE NONE IRRITANT

HAZARD

- 777 -----PHYSICAL PROPERTIES-----

7.

BUILING POINT, DEG F: N/A MELTING POINT, DEG F: 1564

SODIUM CARBONATE (477-17-8)

VAPUR PRESSURE, MM HG/20 DEG C: N/A VAPUR DENSITY (AIR=1): N/A

BFECIFIC GRAVITY (WATER=1): 2.533 WATER BOLUBILITY, %: 30 AFFEARANCE AND ODOR: EVAPORATION RATE (BUTYL ACETATE=1): N/A ODORLESS, WHITE POWDER OR GRANULAR SOLID OR CRYSTAL. SPECIFIC GRAVITY (WATER=1): 2.333 AFFEARANCE AND UDUR:

-----FIRST ATD MEASURES----

GIVE ARTIFICIAL RESPIRATION IF NOT REMOVE TO FRESH AIR. IF INHALED: GET IMMEDIATE MEDICAL ATTENTION. BREATHING.

IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 13 MINUTES, LIFTING THE UFFER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION

OF SKIN CONTACT: IMMEDIATELY WASH SKIN WITH LUIS OF SOAP AND REMOVE CONTAMINATED CLUTHING AND SHOES! WASH BEFORE REUSE. G IN CASE OF SKIN CONTACT: CET MEDICAL ATTENTION IF IRRITATION PERSISTS AFTER WASHING.

IF CONSCIOUS, GIVE LOTS OF WATER DO NOT INDUCE VONTILING. IF SWALLDWED: GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY OR MILK.

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JUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

-----HEALTH HAZARD INFORMATION-----

IMARY ROUTES OF EXPOSURE: INHALATION, SKIN OR EYE CONTACT.

GNS AND SYMPTOMS OF EXPOSURE

INHALATION: BREATHING DUST MAY IRRITATE THE NOSE AND THROAT AND USE COUGHING AND CHEST DISCOMPTRY EXCESSIVE CONTACT CAN CAUSE DAMAGE THE NASAL SEPTUM.

EYE CONTACT: DUSTS WILL IRRITATE THE EYES AND PROLONGED CONTACT A DAMAGE THE EYES.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT WITH THE DUST MAY RITATE THE SKIN WITH BLISTERING AND REDNESS. SOLUTIONS MAY CAUSE VERE IRRITATION OR BURNS.

SHALLOHED: SHALLOHING LARGE QUANTITIES MAY CAUSE NAUSEA, VOMITING, DOMINAL FAIN, DIARRHEA AND COLLAPSE,

RONIC EFFECTS OF EXPOSURE: MAY CAUSE SENSITIZATION.

DICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE REPORTED.

AL: RATS LD50 = 4 G/KG

RMAL: RABBITS 500 Mg/24 HR, HODERATE IRRITATION

HALATION: NO DATA FOUND.

RCINQGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A CARCINOGEN THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR BEARCH ON CANCER, OR THE OCCUPATIONAL PAFETY AND HEALTH ADMINISTRATION

HER DATA: NONE

-----PERSONAL PRINCETION

NTILATION: LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAIN-INING DUST EMISSIONS AT THE POINT OF USE RELOW THE PEL.

SFIRATORY PROTECTION: IF USE COMDITIONS GENERATE DUSTS, WEAR A NICH-FROVED RESPIRATOR APPROPRIATE FOR THOSE EMISSION LEVELS. APPROPRIATE SPIRATORS MAY BE A FULL FACEFIECE OR A HALF MASK AIR-PURIFYING CART-DGE RESPIRATOR WITH PARTICULATE FILTERS, A SELF-CONTAINED BREATHING PARATUS IN THE PRESSURE DEMAND MODE, OR A SUPPLIED-AIR RESPIRATOR.

E PROTECTION: CHEMICAL GOGGLES AND FULL FACE SHIELD. IT IS GENERALLY COGNIZED THAT CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH EMICALS BECAUSE CONTACT LENSES MAY CONTRIBUTE TO THE SEVERITY OF AN E INJURY.

DIECTIVE CLOTHING: LONG-SLEEVED SHIRT, TROUSERS, SAFETY SHOES, RUBBER DVES, AND RUBBER APRON.

HER PROTECTIVE MEASURES: AN EYEWASH AND SAFETY SHOWER SHOULD BE ARBY AND READY FOR USE.

-----FIRE AND EXPLOSION INFORMATION-----

ASH POINT, DEG F: N/A

METHOD USED: N/A

IINGUISHING MEDIA: USE WATER SCRAY, DRY CHEMICAL, COZ, OR ALCOHOL

AM.

ECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF-TIVINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER TAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

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UNUSUAL FIRE AND EXPLOSION HAZARDS: EXTINGUISH ALL NEARBY BOURCES OF IGNITION.

-----IMZARDOUS REACTIVITY----

STABILITY: STABLE . POLYMERIZATION: WILL NOT OCCUR CUNDITIONS TO AVOID: OFEN FLAMES, WELDING ARCS, OR OTHER HIGH TEMPERATURE SOURCES WHICH MAY INDUCE THERMAL DECOMPOSITION.

MATERIALS TO AVOID: ACIDS.

HAZARDOUS DECOMPOSITION FRODUCISE MAY LIBERATE CARBON MONOXIDE. CARBON DIOXIDE OR OXIDES OF SOUTON

ACTION TO TAKE FOR SPILLS OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, AND A SELF-CONTAINED BREATHING APPARATUS IN THE PRESSURE DEMAND MODE OR A SEPPLIED-AIR RESPIRATOR. IF THE SPILL OR LEAK IS SMALL, A FULL FACEPIECE AIR-PURIFYING CARRIDGE RESPIRATOR EQUIPPED WITH PARTICULATE FILTERS MAY BE SATISFACTORY. IN ANY EVENT, ALWAYS WEAR EYE FROTECTION. FOR SMALL SPILLS, SWEEP UP AND DISPUSE OF IN DUT-APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, SHOVEL INTO DOT-APPROVED WASTE CONTAINERS. KEEP DUT OF SEWERS, STORM DRAINS, SURFACE WATERS, AND SOIL. WEAR PROTECTIVE EQUIPMENT INCLUDING CONFLY WITH ALL AFFLICABLE GOVERNMENTAL REGULATIONS ON SFILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

DISFOSAL METHODS: DISFOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SFILLS OR LEAKS IN A MANNER APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN FROMER DISPOSAL PROCEDURES.
NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

-----SPECIAL PPECAUTIONS-----

STORAGE AND HANDLING FRECAUTIUNS: STORE IN A COOL, DRY, WELL-VENTILATED PLACE. STORE AWAY FROM ALL DIMER CHEMICALS AND POTENTIAL SOURCES OF CONTAMINATION. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTAINER. WASH THOROUGHLY AFTER HANDLING. DO STORAGE AND HANDLING PRECAUTIUMS: NOT GET IN EYES, ON SKIN, OR ON CLOTHING

REPAIR AND MAINTENANCE PRECAUTIONS NONE.

OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND DTHER PRECAUTIONS: HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

-----FOR ADDITIONAL INFORMATION-----

CONTACT DOUGLAS EISNER, TECHNICAL DIRECTOR, VAN WATERS & ROGERS INC.
DURING BUSINESS HOURS, PACIFIC TIME (206) 447-3711

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