

PENRAY COMPANY -- NALCOOL 2000 COOLING SYSTEM TREATMENT -- 6850-01-085-4719

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

Product ID:NALCOOL 2000 COOLING SYSTEM TREATMENT

MSDS Date:07/08/1992

FSC:6850

NIIN:01-085-4719

MSDS Number: BQNGG

=== Responsible Party ===

Company Name:PENRAY COMPANY

Address:440 DENNISTON COURT

City:WHEELING

State:IL

ZIP:60090

Country:US

Info Phone Num:708-459-5000

Emergency Phone Num:

800-942-5969

Preparer's Name:P.A. ZOUBECK

CAGE:FO778

=== Contractor Identification ===

Company Name:PENRAY COMPANY

Address:440 DENNISTON COURT

City:WHEELING

State:IL

ZIP:60090

Phone:(312) 459-5000

CAGE:FO778

Company Name:PENRAY COMPANY INC

Address:440 DENNISTON CT

Box:City:WHEELING

State:IL

ZIP:60090

Country:US

Phone:847-459-5000/ 800-752-7869

CAGE:0WT79

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

Ingred Name:SODIUM NITRITE (SARA III)

CAS:7632-00-0

RTECS #:RA1225000

Fr

action by Wt: 5%
Other REC Limits:NONE SPECIFIED BY M.
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:SODIUM MERCAPTOBENZOTHIAZOLE
CAS:2492-26-4
RTECS #:DL6825000
Fraction by Wt: 5%
Other REC Limits:NONE SPECIFIED BY M.

Ingred Name:SODIUM TETRABORATE, ANHYDROUS
CAS:1330-43-4
RTECS #:VZ2240000
Fraction by Wt: 5%
Other REC Limits:NONE SPECIFIED BY M.
OSHA PEL:10 MG/M3
ACGIH TLV:1 MG/M3; 9293

Ingred Name:SODIUM NITRATE
CAS:7631-99-4
RTECS #:WC5600000
Fraction by Wt: 5%
Other REC Limits:NONE
SPECIFIED BY M.

Ingred Name:SODIUM SILICATE
CAS:1344-09-8
Fraction by Wt: 5%
Other REC Limits:NONE SPECIFIED BY M.

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE- MAY CAUSE IRRITATION OF EYES,
SKIN, RESPIRATORY AND GI. TRACT. INGESTION MAY CAUSE KIDNEY DAMAGE
OR CAN BE FATAL. SODIUM NITRITE HAS CAUSED REPRODUCTIVE D
EFFECTS IN
ANIMALS. CHRONIC: MAY DAMAGE LIVER, KIDNEY AND CENTRAL NERVOUS
SYSTEM.
Effects of Overexposure:EYES AND SKIN: IRRITATION, TEARING, REDNESS.
INGESTION:NAUSE, CRAMPS, VOMITING.
Medical Cond Aggravated by Exposure:PREGNANT WOMEN SHOULD AVOID
EXPOSURE TO SODIUM NITRITE.

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

First Aid:INHALATION:REMOVE TO FRESH AIR, PROVIDE CPR/OXYGEN IF NEEDED.
EYE CONTACT:FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL HE

LP. SKIN

CONTACT:WASH WITH SOAP AND WATER. GET MED ATTENTION IF SYMPTOMS
PERSIS T. INGESTION:INDUCE VOMITING, DRINK 1-2GLASSES OF WATER. GET
MEDICAL HELP IMMEDIATELY.

===== Fire Fighting Measures =====

Flash Point:NONE

Extinguishing Media:EXTINGUISH WITH AGENT SUITABLE FOR SURROUNDING FIRE

Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR PROTECTIVE CLOTHING
AND SELF-CONTAINED BREATHING APPARATUS. WATER SPRAY MAY BE USED TO
COOL CONTAINERS
PREVENTING PRESSURE BUILDUP.

Unusual Fire/Explosion Hazard:MAY EVOLVE TOXIC OXIDES OF NITROGEN UNDER
FIRE.

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

Spill Release Procedures:WEAR PROTECTIVE EQUIP. CONTAIN AND COLLECT
WITH INERT ABSRBNT MATERIAL SUCH AS CLAY OR SOIL AND PLACE INTO
RECOVERY DRUMS FOR DISPOSAL.

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

Handling and Storage Precautions:STORE IN COOL,DRY,WELL VENTILATED
AREA. PRO

TECT FROM PHYSICAL DAMAGE.AVOID ANY PHYSICAL CONTACT. KEEP
CONTAINERS TIGHTLY CLOSED

Other Precautions:WARNING! HARMFUL IF SWALLOWED. DO NOT TAKE INTRNLLY.
AVOID CONTACT W/EYE,& PROLNGD/REPEATD SKIN CONTCT;EMPTY CONTNR MAY
CONTAIN RESIDUAL PROD;WASH CONTMNTD CLOTHG/AREA. DISCARD CONTMNTD
SHOES/CLOTH.

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

Respiratory Protection:NONE SHOULD BE NEEDED

Ventilation:GENERAL VENTILATION IS RECOMMENDED

Protective Gloves:IM

PERMEABLE

Eye Protection:CHEM SPLASH GOGGLES

Other Protective Equipment:FULL WORK CLOTHING TO PREVENT REPEATED OR
PROLONGED CONTACT.

Work Hygienic Practices:WASH HANDS THOROUGHLY AFTER USE.

Supplemental Safety and Health

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

HCC:N1

Boiling Pt:B.P. Text:212F,100C

Vapor Density:9.7

Spec Gravity:1.16

pH:11.5

Solubility in Water:COMPLETE

Appearance and Odor:REDISH LIQUID, ODORLESS

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

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Stability Indicator/Materials to Avoid: YES
STRONG ACIDS, AMINES.
Stability Condition to Avoid: NOT KNOWN
Hazardous Decomposition Products: OXIDES OF CARBON, AND OXIDES OF
NITROGEN MAY BE FORMED.

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

Waste Disposal Methods: PER MFR, IF THIS PRODUCT BECOMES A WASTE, IT DOES
NOT MEET THE CRITERIA OF HAZARDOUS WASTE AS DEFINED UNDER RCRA; AS
A NON- HAZARDOUS LIQ WASTE, IT SHOULD BE SOLIDIFIED BEFORE DISPOSAL TO

A SANITARY LANDFILL. FOLLOW ALL REGULATIONS FOR DISPOSAL.

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