

===== 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

=== Contrac

tor 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

Fraction by Wt: 5%

Other REC Limits:NONE SPECIFIED BY M.

EPA Rpt Q

ty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:SODIUM MERCAPTOBENZOTHAZOLE  
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  
Frac  
tion 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 DEFECTS IN  
ANIMALS. CHRONIC: MAY DAMAGE LIVER, KIDNEY AND CE  
NTRAL 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 HELP. SKIN  
CONTACT:WASH WITH SOAP AND WATER. GET MED ATTENTION

IF SYMPTOMS  
PERSIST. 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 ABSORBENT 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. PROTECT FROM PHYSICAL DAMAGE. AVOID ANY PHYSICAL CONTACT. KEEP  
CONTAINERS TIGHTLY CLOSED  
Other Precautions:WARNING! HARMFUL IF SWALLOWED. DO NOT TAKE INTERNALLY.  
AVOID CONTACT W/EYE, & PROLONGED/REPEATED SKIN CONTACT; EMPTY CONTAINER MAY  
CONTAIN RESIDUAL PRODUCT; WASH CONTAMINATED CLOTHING/AREA. DISCARD CONTAMINATED  
SHOES/CLOTH.

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

Respiratory Protection:NONE SHOULD BE NEEDED  
Ventilation:GENERAL VENTILATION IS RECOMMENDED  
Protective Gloves:IMPERMEABLE  
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 =====

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 SOLIDIFD BEFORE DISPOSAL TO A SANITARY LANDFILL. FOLLOW ALL REGULATIONS FOR DISPOSAL.

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