

NATIONAL STARCH & CHEMICAL COMPANY; PERMABOND -- PERMA-LOK (R) ANAEROBIC SURFACE CONDITIONER P/N 82-9971 -- 8030-01-152-2285

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

Product ID:PERMA-LOK (R) ANAEROBIC SURFACE CONDITIONER P/N 82-9971

MSDS Date:01/09/1992

FSC:8030

NIIN:01-152-2285

MSDS Number: BSHNJ

=== Responsible Party ===

Company Name:NATIONAL STARCH & CHEMICAL COMPANY; PERMABOND

Address:FINDERNE AVE

Box:6500

City:BRIDGEWATER

State:NJ

ZIP:08807

Country:US

Info Phone Num:908-685-5000

Emergency Phone Num:908-685-5000

Preparer's Name:PHILIP A TOSCANO

CAGE:85091

=== Contractor Identification ===

Company Name:NATIONAL STARCH AND CHEMICAL CORP

Address:10 FINDERNE AVE

Box:6500

City:BRIDGEWATER

State:NJ

ZIP:08807

Country:US

Phone:908-685-5379; FAX:908685-5306

CAGE:85091

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

Ingred Name:1,1,1-TRICHLOROETHANE (SARA III) (ORAL LD50 10
300 MG/KG

RAT; LC50 24000 PPM/1 HR RAT)

CAS:71-55-6

RTECS #:KJ2975000

Fraction by Wt: 95.8%

Other REC Limits:*CEIL:350 PPM 15 MIN

OSHA PEL:350 PPM

ACGIH TLV:350PPM;STEL 450PPM *

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ozone Depleting Chemical:1

Ingred Name:CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF6400000

Fraction by Wt: 4%

Other REC Limits:NONE SPECIFIED

OSHA PEL:10000 PPM

ACGIH TLV:5000PPM;STEL30000PPM

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

Inhalation: YES Skin: YES Ingestion: YES

Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO

Health Hazards Acute and Chronic: EYE: IRRITATING, INJURE TISSUE IF NOT REMOVED PROMPTLY. SKIN: REPEATED/PROLONGED CONTACT: DEFATTING (IRRITATION/DRYNESS). INHALATION: IRRITATING TO EYES, RESP TRACT. HEADACHE, DIZZINESS, ANESTHETIC, CENTRAL NERVOUS SYSTEM EFFECTS. ASPHYXIAN. INGESTION: TOXIC. MOUTH, THROAT & STOMACH IRRIT, GASTRIC TRACT DAMAGE/DISORDE

Effects of Overexposure: CHRONIC:

MINIMAL KIDNEY OR LIVER DAMAGE FROM

LONG TERM INHALATION OF AMOUNTS EXCEEDING TLV. MAY CAUSE SKIN IRRITATION. TARGET ORGANS: SKIN, EYES, KIDNEYS, LIVER.

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

First Aid: EYE: IMMEDIATELY FLUSH WITH WATER 15 MIN, LIFT EYELIDS. GET PROMPT MEDICAL AID. SKIN: WASH WITH SOAP & WATER. IN CASE OF COLD BURNS, GET PROMPT MEDICAL AID. INHALATION: REMOVE TO FRESH AIR. IF BREATHING DIFFICULT, GIVE OXYGEN. IF BREATHING STOPPED, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL AID. INGESTION: IF CONSCIOUS, GIVE MILK OR WATER, THEN INDUCE VOMITING. GIVE NOTHING BY MOUTH TO DROWSY/UNCONSCIOUS PERSON. KEEP WARM & QUIET. GET MEDICAL AID.

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

Flash Point Method: TCC

Flash Point: NR

Autoignition Temp: Autoignition Temp Text: 932 F

Lower Limits: 7.0

Upper Limits: 16.0

Extinguishing Media: DRY CHEMICAL, CO2, ALCOHOL FOAM

Fire Fighting Procedures: EQUIP FIRE FIGHTERS WITH SELF-CONTAINED BREATHING APPARATUS

TO PROTECT AGAINST POTENTIALLY TOXIC AND

IRRITATING FUMES. COOL EXPOSED EQUIPMENT WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: AEROSOL CONTAINER MAY RUPTURE OR BURST IF HEATED ABOVE 120 F OR 48 C.

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

Spill Release Procedures: TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE IN CONTAINER FOR LATER DISPOSAL.

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

Handling and Storage Precautions: STO

RE AT LESS THAN 120F. AVOID
EXCESSIVE HEAT. STORE IN A COOL, DRY PLACE. DO NOT PUNCTURE OR
INCINERATE AEROSOL CONTAINERS.

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

Respiratory Protection:NIOSH APPROVED RESPIRATOR IF REQUIRED.
SELF-CONTAINED BREATHING APPARATUS IN EMERGENCY AND NON-ROUTINE
SITUATIONS.

Ventilation:LOCAL; GENERAL

Protective Gloves:PROTECTIVE GLOVES TO PREVENT CONTACT

Eye Protection:SAFETY GLASSES WITH SIDE SHIELDS

Other Protective Equipme

nt:REMOVE AND LAUNDRER GROSSLY CONTAMINATED
CLOTHING BEFORE REUSE.

Work Hygienic Practices:WASH HANDS BEFORE EATING, DRINKING, SMOKING OR
USING RESTROOM FACILITIES.

Supplemental Safety and Health

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

Vapor Pres:100 @ 20C

Vapor Density:4.6

Spec Gravity:1.210 (WATER=1)

Evaporation Rate & Reference:12.8 (BU AC=1)

Solubility in Water:INSOLUBLE

Percent Volatiles by Volume:100

===== Stability and Reactivity Dat

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Stability Indicator/Materials to Avoid:YES

CHEMICALLY ACTIVE METALS (ALUMINUM POWDER, SODIUM, POTASSIUM, MAGNESIUM
POWDER) AND THEIR HYDROXIDES.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE,
CHLORINE COMPOUNDS, HYDROCARBONS OF INDETERMINATE NATURE (DEPENDING
ON CONDITIONS).

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

Waste Disposal Methods:WASTE DISPOSAL SHOULD BE IN ACCORDANCE WITH
EXISTING FEDERAL, STATE AND LO

CAL ENVIRONMENTAL REGULATIONS.

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