

NATIONAL STARCH & CHEMICAL COMPANY; PERMABOND -- PERMA-LOK (R) HM 128 P/N 78-4308 --  
8030-01-158-6070

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

Product ID:PERMA-LOK (R) HM 128 P/N 78-4308

MSDS Date:12/31/1991

FSC:8030

NIIN:01-158-6070

MSDS Number: BSHNL

=== Responsible Party ===

Company Name:NATIONAL STARCH & CHEMICAL COMPANY; PERMABOND

Address:FINDERNE AVE

Box:6500

City:BRIDGEWATER

State:NJ

ZIP:08807

Co

untry: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:TETRAETHYLENEGLYCOL DIMETHACRYLATE

CAS:109-17-1

Fraction by Wt: >1%

Other REC Limits:NONE SPECI

FIED

Ingred Name:HYDROXYETHYL METHACRYLATE (ORAL LD40 1250 MG/KG RAT)  
CAS:868-77-9  
RTECS #:OZ4725000  
Fraction by Wt: >1%  
Other REC Limits:NONE SPECIFIED

Ingred Name:CUMENE HYDROPEROXIDE (SARA III) (ORAL LD50 800MG/KG RAT 83%  
SOLUTION;DERMAL LD50 1.3ML/KG RAT;INHAL LC50 700PPM/6HR)  
CAS:80-15-9  
RTECS #:MX2450000  
Fraction by Wt: >1%  
Other REC Limits:NONE SPECIFIED  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

Ingred Name:VOC: 0.09 LBS/GAL (10 G/L)  
RTECS #:9999999VO  
Other REC Limits:NONE SPECIFIED

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===== 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: EYE: IRRITATING, INJURE TISSUE  
IF NOT REMOVED PROMPTLY. SKIN: FREQUENT/PROLONGED CONTACT:  
IRRITATE, DERMATITIS. SENSITIZATION, DERMATITIC RASH. INHALATION:  
NOT HAZARDOUS UNDER NORMAL USE. IRRITATING/TOXIC VAPORS RELEASED  
AT ELEVATEDTEMPS. INGESTION: NOT EVALUATED,  
ASSUMED TO CAUSE NAUSEA  
AND VOMITING.  
Effects of Overexposure:CHRONIC: IN CERTAIN INDIVIDUALS, SENSITIZATION  
MAY OCCUR CAUSING DERMATITIS WITH EVEN MINIMAL CONTACT. DUE TO SKIN  
ABSORPTION WITH EXCESSIVE CONTACT, PRODUCT MAY PRODUCE NERVOUS  
SYSTEM EFFECTS, I.E., ATAXIA.  
Medical Cond Aggravated by Exposure:N/K

TARGET ORGANS: SKIN; EYES.

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

First Aid:EYE:IMMED FLUSH W/WATER 15 MIN,

LIFT EYELIDS.GET PROMPT MED

AID. SKIN:FLUSH EXPOSURE AREAS W/ SOAP & WATER TILL CHEMICAL  
REMOVED.REMOVE CONTAMINATED CLOTHING & WASH BEFORE REUSE. INHAL:NOT  
NORMALLY REQ'D.REMOVE TO FRESH AIR.IF BREATHING DIFFICULT,GIVE  
OXYGEN;IF STOPPED,GIVE ARTIFICIAL RESP.GET MED AID. INGEST:DON'T INDUCE  
VOMIT. IF CONSCIOUS,GIVE (NOTHING TO UNCONSCIOUS) WATER/MILK.KEEP  
WARM/QUIET.GET MED AID

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

Flash Point Method:SCC

Flash Point

:230F,110C

Extinguishing Media:CO2, DRY CHEMICAL, FOAM, WATER FOG

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:POLYMERIZATION MAY TAKE PLACE AT ELEVATED  
TEMPERATURES.

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

Spill Release Procedures:WEAR PROTECTIVE CLOTH. STOP LEAK IF W/OUT  
RISK.SMALL: T

WAKE UP W/SAND,ETC. PLACE IN CONTAINER. LARGE:PRODUCT MAY  
POLYMERIZE (GENERATE HEAT & PRESSURE) VENT DISPOSAL CONTAINER TO  
PREVENT BUILDUP OF PRESSURE.

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

Handling and Storage Precautions:STORE AT ROOM TEMP OUT OF DIRECT  
SUNLIGHT IN A DRY AREA. MAXIMUM STORAGE TEMPERATURE IS 100F. AVOID  
EXCESSIVE HEAT.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL HANDLING  
CONDITIONS.

USE NIOSH APPROVED RESPIRATOR IF VAPOR OR MIST LEVELS ARE  
IRRITATING.

Ventilation:GENERAL

Protective Gloves:PROTECTIVE GLOVES TO PREVENT CONTACT

Eye Protection:SAFETY GLASSES, GOGGLES OR FACE SHIELD

Other Protective Equipment:NO SPECIAL CLOTHING REQUIRED FOR LOW VOLUME  
ACTIVITY. REMOVE CLOTHING AND LAUNDER BEFORE REUSE IF CONTAMINATED  
W/PRODUCT

Work Hygienic Practices:WASH HANDS WITH SOAP & WATER IF CONTACT WITH  
PRODUCT OCCURS BEFORE EATING, DRINKING, SMOKING

NG OR USING TOILET

FACILITIES.

Supplemental Safety and Health

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

Boiling Pt:B.P. Text:POLYMERIZES

Vapor Pres:0.01 @ 77F

Vapor Density:1.01

Spec Gravity:1.070 (WATER=1)

Viscosity:500 CPS

Solubility in Water:INSOLUBLE

Appearance and Odor:RED LIQUID; MILD, PLEASANT ODOR

Percent Volatiles by Volume: