

NATIONAL STARCH AND CHEMICAL CORP -- PERMA-LOK (R) LM 113 P/N 78-4311 --
8030-01-054-3968

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

Product ID:PERMA-LOK (R) LM 113 P/N 78-4311

MSDS Date:10/05/1999

FSC:8030

NIIN:01-054-3968

Status Code:A

MSDS Number: CLNNW

=== Responsible Party ===

Company Name:NATIONAL STARCH AND CHEMICAL CORP

Address:10 FINDERNE AVE

Box:6500

City:BRIDGEWATER

State:NJ

ZIP:08807

Country:

US

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

Emergency Phone Num:908-685-5000

Preparer's Name:ERNEST CARTER

Chemtrec Ind/Phone:(800)424-9300

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:TETRAETHYLENE GLYCOL, DIMETHACRYLATE

CAS:109-17-1

RTEC

S #:OZ4000000

> Wt:1.

Ingred Name:2-HYDROXYETHYL METHACRYLATE

CAS:868-77-9

RTECS #:OZ4725000

> Wt:1.

Ingred Name:CUMENE HYDROPEROXIDE

CAS:80-15-9

RTECS #:MX2450000

> Wt:1.

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Acute and Chronic:EYE: IRRITATING, AND MAY INJURE EYE

TISSUE IF NOT REMOVED PROMPTLY. SKIN CONTACT: FREQUENT OR PROLONGED
CONTAC

T MAY IRRITATE AND CAUSE DERMATITIS. INHALATION: BASED ON ITS
LOW VOLATILITY, PRODUCT IS NOT CONSIDERED TO BE A RESPIRATORY
HAZARD UNDER NORMAL CONDITIONS. IRRITATING VAPORS MAY BE RELEASED
AT ELEVATED TEMPERATURES. INGESTION: EFFECTS HAVE NOT BEEN
EVALUATED BUT ARE ASSUMED TO CAUSE NAUSEA AND VOMITING.

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

First Aid:EYE: FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15
MINUTES, LIFTING UPPER AND LOWER

eyelids. GET PROMPT MEDICAL

ATTENTION. SKIN CONTACT: FLUSH EXPOSED AREAS THOROUGHLY WITH SOAP
AND WATER UNTIL ALL CHEMICAL IS REMOVED. REMOVE CONTAMINATED
CLOTHING AND LAUNDRY BEFORE REUSE. INHALATION: FIRST AID IS NOT
NORMALLY REQUIRED. REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT,
GIVE OXYGEN. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL
RESPIRATION. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE
VOMITING. IF INDIVIDUAL IS CONSCIOUS, GIVE MILK OR WATER TO DILUTE

S

TOMACH CONTENTS. KEEP WARM AND QUIET. GET PROMPT MEDICAL ATTENTION.

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

Flash Point Method:SCC

Flash Point:=110.C, 230.F

Extinguishing Media:CO2; DRY CHEMICAL; FOAM; WATER FOG.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD BE EQUIPPED 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 CLOTHING. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. FOR SMALL SPILLS TAKE UP WITH SAND OR OTHER INERT ABSORBENT MATERIAL AND PLACE IN A CONTAINER FOR LATER DISPOSAL. NOTE: IN BULK QUANTITIES, PRODUCT ABSORBED ON INERT MATERIAL MAY POLYMERIZE GENERATING SIGNIFICANT HEAT AND PRESSURE. VENT DISPOSAL CONTAINER TO PREVENT BUILD UP OF PRESSURE. CAN CAREFULLY SOLIDIFY WITH ANAEROBIC SURF

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

Handling and Storage Precautions:STORE OUT OF DIRECT SUNLIGHT IN A DRY AREA. MAXIMUM STORAGE TEMPERATURE IS 100 F.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL HANDLING CONDITIONS. USE NIOSH APPROVED RESPIRATOR IF VAPOR OR MIST LEVELS ARE IRRITATING.

Protective Gloves:WEAR APPROPRIATE PROTECTIVE GLOVES

Eye Protection:SAFETY GLASSES, GOGGLES OR FACE SHIELD

Supplemental Safety and Health

WASH HANDS WITH SOAP AND WATER IF CONTACT WITH PRODUCT OCCURS OR BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES.

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

Vapor Pres:0.01 (77 F)

Vapor Density:1.01

VOC Pounds/Gallon:10

VOC Grams/Liter:.09

Viscosity:1000 CPS

Solubility in Water:INSOLUBLE

Appearance and Odor:PURPLE LIQUID;MILD PLEASANT ODOR

Pe

Percent Volatiles by Volume: