

M A T E R I A L S A F E T Y D A T A S H E E T

PRODUCT NAME: UNIVERSAL RETARDER
 PRODUCT CODE: 2050

HMIS CODES: H F R P
 1*2 0

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: PCL
 ADDRESS : 3150 E. PICO BLVD.
 LOS ANGELES, CA 90023-3683
 EMERGENCY PHONE(CHEMTREC) : (800) 424-9300 DATE PRINTED : 1/28/2009
 INFORMATION PHONE : (800) 672-4900 NAME OF PREPARER :

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mmHG	@TEMP(F)
ETHYL-3-ETHOXYPROPIONATE	763-69-9	1.1	68

OSHA PEL: N/E, ACGIH TLV: 50 ppm

No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE (Deg F): 165 DENSITY: 7.91 lb/gal
 VAPOR DENSITY: HEAVIER THAN AIR SPECIFIC GRAVITY (H2O=1): .95
 MATERIAL V.O.C.: 7.91 lb/gal MATERIAL V.O.C.: 948 g/l
 SOLUBILITY IN WATER: Soluble EVAPORATION RATE: SLOWER THAN ETHER
 V.O.C. COMPOSITE VAPOR PRESSURE: 1.1 mmHg @ 68 Deg F
 APPEARANCE AND ODOR: Colorless liquid with mild ester odor.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT(Deg F): 136 METHOD USED: TCC
 FLAMMABLE LIMITS IN AIR BY % VOLUME- LOWER: 1 UPPER: 0
 EXTINGUISHING MEDIA: ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES
 COMBUSTIBLE! Use approved self-contained breathing apparatus. Do not use direct stream of water.

UNUSUAL FIRE AND EXPLOSION HAZARDS
 Fire-exposed containers should be cooled with water to prevent pressure build-up which could result in container rupture.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE

CONDITIONS TO AVOID

Avoid heat, sparks and open flame

INCOMPATIBILITY (MATERIALS TO AVOID)

Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Inhalation: May cause CNS depression.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Skin and eye contact: May cause irritation to both.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Skin absorption: May cause irritation.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Ingestion: May cause CNS depression.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Acute: May cause irritation to nose, eyes and skin. May also cause CNS (central nervous system) depression which may be evidenced by giddiness, headache, dizziness and nausea; in extreme cases, unconsciousness and death may occur. Chronic: Prolonged or repeated contact may result in dermatitis and damage to central nervous system, liver and kidneys.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing eye, skin and respiratory disorders may be aggravated.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: REMOVE TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. SPLASH (EYES): FLUSH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SPLASH (SKIN): WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. INGESTION: DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION IMMEDIATELY.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION AND PROVIDE VENTILATION. LARGE SPILLS MAY BE PUMPED TO SALVAGE VESSELS. SMALL SPILLS MAY BE PICKED UP WITH AN ABSORBENT MATERIAL.

WASTE DISPOSAL METHOD

Place in tightly closed containers and dispose of in accordance with local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep away from heat, sparks and open flames. Keep containers closed when not in use. Use with adequate ventilation.

OTHER PRECAUTIONS

Do not take internally. Ground equipment to prevent accumulation of static charge. Do not cut, weld, drill or grind on or near containers.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

Use self-contained breathing apparatus where vapor concentration may be above TLV limits. Where vapor does not exceed TLV limits, use NIOSH/MSHA approved respirator.

VENTILATION

Use explosion-proof ventilation as required to control vapor concentrations.

PROTECTIVE GLOVES

Chemical resistant gloves

EYE PROTECTION

Safety glasses, splash goggles or face shield. Contact lenses should not be worn.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Safety showers and eyewash stations should be provided.

WORK/HYGIENIC PRACTICES

Wash hands thoroughly before eating or using the washroom. Smoke in smoking areas only.

===== SECTION IX - REGULATORY INFORMATION =====

CALIFORNIA PROPOSITION 65

None

===== SECTION X - DISCLAIMER =====

The information contained herein is based on the data available to us and is believed to be correct. However, PCL makes no warranty expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. PCL assumes no responsibility for injury from the use of the product described herein.