MATERIAL SAFETY DATA SHEET

TOTAL Specialties USA, Inc.. 5 N. Stiles Street, Linden NJ 07036 Phone 1-908-862-9300

Product PENKOTE
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REVISION DATE



IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME: PRODUCT #:

PENKOTE

CHEMICAL NAME: CAS #'S: Mixture Mixture

PRODUCT APPEARANCE AND ODOR: CHEMICAL FAMILY:
Amber liquid, solvent odor Petroleum hydrocarbon

SYNONYMS: EMERGENCY TELEPHONE:

General purpose penetrating oil 1-800-442-5823 or

And rust preventive

1-800-442-5823 or 1-908-862-9300

COMPONENTS AND HAZARD INFORMATION

COMPONENTS: W/W HAZARD DATA (TLV, LD50, LC50, ETC.):

Aliphatic solvent naphtha 100 ppm ACTIH TWA

CAS# 64742-47-8, CAS# 8052-41-3

Petroleum-based lube oil 5 mg/m3 TWA (OSHA, ACGIH) (as an oil mist)

CAS# 64742-52-5

Barium oxidate, CAS# mixture N/E

Barium sulfonate, CAS# mixture N/E

Paraffin wax, CAS# 8002-74-2 2 mg/m3 ACGIH TWA

1,2,4-Trimethylbenzene 25 ppm ACGIH TWA

CAS# 95-63-6

Oleic acid, CAS# 112-80-1 N/E

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):

Health Flammability Reactivity

1 2 0

TRANSPORTATION INFORMATION

TRANSPORTATION/SHIPPING INFORMATION:

Proper shipping name: Combustible Liquid (petroleum distillate) NA1993, PG III

Hazard Class: Combustible liquid.

Hazard ID Number: NA 1993

Note: Per 49 CFR 17.150 (f)combustible liquids (that are not a hazardous substance, hazardous waste or marine pollutant) are not regulated by the DOT when in non-bulk containers (less than or equal to 119 gal). Thus the product is not regulated when in non-bulk packages.

EMERGENCY FIRST AID

EYE CONTACT:

If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN CONTACT:

In case of skin contact, remove contaminated clothing and wash skin thoroughly with soap and water.

INHALATION:

Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen if available. If overexposure to oil mist, remove from further exposure until excessive oil mist condition subsides.

INGESTION:

If ingested, do not induce vomiting. Call a physician immediately.

FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT (MINIMUM): AUTOIGNITION TEMPERATURE:

40°C (104°F) Test method: Tag Closed Cup 254 C (490 F)

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION:

Health Flammability Reactivity

1 2 0

FLAMMABLE OR EXPLOSIVE LIMITS (approximate percent by volume in air): Estimated values: lower: NE upper: NE

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:

Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Eighth Edition (1984):

Use water spray, dry chemical, foam, or carbon dioxide. Water or foam my cause frothing. Use water to keep fire-exposed containers cool. Water froth may be used to flush spills away form exposure. Minimize breathing gases, vapor, fumes, or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

"EMPTY" CONTAINER WARNING:

Empty containers retain residue (liquid or vapor) and can be dangerous. DO NOT PRESSURIZE, WELD, CUT BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged, and returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with government regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

HEALTH AND HAZARD INFORMATION

EXPOSURE LIMIT FOR TOTAL PRODUCT: Mild toxicity. Exposure limit for solvent 8 hour workday is

TWA 100 ppm (435 mg/M^3) ACGIH and OSHA 150 ppm (655 mg/M^3) STEL

VARIABILITY AMONG INDIVIDUALS:

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized.

EFFECTS OF OVEREXPOSURE (Signs and symptoms of exposure):

Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis.

Product contacting the eye may cause irritation.

Product has a low order of oral and dermal toxicity.

Possible aspiration hazard.

Induced vomiting may cause aspiration of product into the lungs.

(See Emergency First Aid Section).

PHYSICAL DATA

The following data are approximate or typical values and should not be used for precise design purposes.

BOILING RANGE: VAPOR PRESSURE:

305-396 F (152-202 C) <10 mm Hg @ $25^{\circ}\text{C}/77^{\circ}\text{F}$

SPECIFIC GRAVITY $(25^{\circ}C/25^{\circ}C)$: VAPOR DENSITY (AIR = 1):

(WATER = 1)

0.79

MOLECULAR WEIGHT: PERCENT VOLATILE BY VOLUME:

JE 90% @ atm at 25C/77 F

EVAPORATION RATE @ 1 ATM. AND 25°C SOLUBILITY IN WATER @ 1 ATM. and 25°C

0.1 (N butyl acetate =1) $(77^{\circ}F)$: insoluble

POUR, CONGEALING OR MELTING POINT: FREEZING POINT:

<-18 C n/e

VISCOSITY at 25C 0.95 cp

REACTIVITY

This product is stable and will NOT react violently with water. Hazardous olymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite, etc., as this represents a serious explosion hazard.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Fumes, smoke, carbon monoxide, oxides of sulfur, and other decomposition products, in case of incomplete combustion.

CONDITIONS TO AVOID:

Open flames, sparks, heat, pilot lights and static electricity.

TOXICITY						
ORAL (Acute)	N/E					
DERMAL (Acute)	N/E					
EYE	N/E					
INHALATION (Acute)	N/E					
CHRONIC, SUBCHRONIC, ETC.	N/E					

Medical Conditions Aggravated by Exposure: Unknown This product does NOT contain any ingredients identified as carcinogenic by IARC, NTP, or OSHA.

SARA Section 313 Status: The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and reauthorization act of 1986 and 40 CFR Part 372:

Trimethylbenzene CAS 95-63-64 1.95 wt % max Barium compounds CAS (n/e) 6.0 wt% max

SARA SECTION 311 - HAZARD CATEGORIES:

This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established be Sections 311 and 312 of SARA as indicated below:

YES	IMMEDIATE (ACUTE) HEALTH HAZARD	NO	SUDDEN RELEASE OF PRESSURE HAZARD
NO	DELAYED (CHRONIC) HEALTH HAZARD	NO	REACTIVE HAZARD
YES	FIRE HAZARD		

CERCLA HAZARDOUS SUBSTANCES:

As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance.

U.S. TSCA INVENTORY

All components of this material are listed on the U.S. TSCA Inventory.

CALIFORNIA PROPOSITION 65

This product contains the following components for which the State of California has found to cause cancer, birth defects or other reproductive harm: benzene

NEW JERSEY RIGHT-TO-KNOW LABEL

Petroleum distillate

ADDITIONAL REGULATORY REMARKS

Volatile Organic compounds: This product is NOT exempt from VOC reporting.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Keep product out of sewers and watercourses by diking or impounding. Absorb with sand or inert material. Sweep or scoop up and remove. Prevent spread of spill. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with local regulations.

WASTE DISPOSAL METHOD: (Consult federal, state, or local authorities for proper disposal procedures.)

Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved waste site or facility.

PROTECTION AND PRECAUTIONS

VENTILATION: (Always maintain below permissible exposure limits.)

Use local exhaust to capture vapor, mist or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air.

RESPIRATORY PROTECTION: (Use only NIOSH approved equipment.)

Normally not needed at ambient temperatures. Use supplied air respiratory protection in confined or enclosed spaces, if needed. Use filter, dust, fume, or mist respirator type under misting conditions. Use can or cartridge; gas or vapor respirator type under conditions exceeding TWA standard.

PROTECTIVE GLOVES:

Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION:

Use splash goggles or face shield when eye contact may occur.

OTHER PROTECTIVE EQUIPMENT:

Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

WORK PRACTICES/ENGINEERING CONTROLS:

Keep containers closed when not in use. Do not handle near heat, sparks, flame or strong oxidants.

PERSONAL HYGIENE:

Minimize breathing vapor, mist, or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

OTHER REGULATORY INFORMATION

OSH HAZARD DETERMINATION: This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: All of the components of this material are listed on the Toxic Chemical Substances Inventory. This product is in compliance with the Toxic Substances control Act (TSCA).

SARA SECTION 311 - HAZARD CATEGORIES:

This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established be Sections 311 and 312 of SARA as indicated below:

YES	IMMEDIATE (ACUTE) HEALTH HAZARD	NO	SUDDEN RELEASE OF PRESSURE HAZARD
NO	DELAYED (CHRONIC) HEALTH HAZARD	NO	REACTIVE HAZARD
YES	FIRE HAZARD		

SARA 302/304: There are no components in this product on the SARA 302/304 list.

SARA SECTION 313 - TOXIC COMPONENTS: This product does not contain >1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

CLEAN WATER ACT (CWA):

Under the CWA, discharges of fluids to surface water without proper Federal and State permits must be reported immediately to the National Response Center at (800) 424-8802.

CERCLA HAZARDOUS SUBSTANCES:

As defined by CERCLA, the term "hazardous substance" does not include any ingredients or fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance.

CALIFORNIA PROPOSITION 65

This product contains no ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute.

NEW JERSEY RIGHT-TO-KNOW LABEL

Solvent

WHMIS CLASSIFICATION

This product is a WHMIS controlled substance.

PREPARED BY: Alan Denniston	Technical Services	
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