

MATERIAL SAFETY DATA SHEET

Penetone[®] Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072

GRAFIKLEEN® E844

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Date Prepared: July 2, 2007 MSDS No.: 1282-707A

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: GRAFIKLEEN E844
GENERAL USE: Ink, resin, and coating cleaner
PRODUCT DESCRIPTION: Solvent/solvent blend

 $\label{eq:general-global} \textbf{GENERIC INGREDIENTS:} \ \textbf{Aliphatic ester}, \ \textbf{propylene glycol ether}, \ \textbf{d-limonene}, \ \textbf{surfactant}$

EMERGENCY TELEPHONE NUMBERS: PENETONE 201-567-3000

CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT SECTION

This product is hazardous as defined in 29 CFR1910.1200.

OSHA HAZARD: COMBUSTIBLE

Dipropylene glycol monomethyl ether

OSHA HAZARDOUS INGREDIENTS

 EXPOSURE LIMITS 8 hrs. TWA (ppm)

 CAS#
 OSHA PEL
 ACGIH TLV
 Supplier

 34590-94-8
 100 (skin)
 100
 --

 5989-27-5
 not established
 not established
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SECTION 3 HEALTH INFORMATION & PROTECTION

EMERGENCY OVERVIEW:

d-limonene

Clear, light amber liquid with citrus odor.

Combustible. Can be irritating to eyes, skin, and respiratory tract.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

Slightly irritating but does not injure eye tissue. High vapor concentrations may be irritating.

SKIN CONTACT:

Frequent or prolonged contact may irritate or dry the skin or cause dermatitis. Skin contact may aggravate an existing dermatitis condition.

INHALATION:

High vapor/aerosol concentrations (greater than the TLV) are irritating to the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects.

INGESTION:

Small amounts of this liquid may be drawn into the lungs by either swallowing or vomiting. This may cause severe and delayed health effects such as inflammation of the lungs and infection of the bronchi. Ingestion may cause irritation of the digestive tract and diarrhea.

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CHRONIC:

Ingestion of large amounts of d'limonene has caused kidney and liver damage in male rats but not in female rats or mice of both species.

FIRST AID MEASURES:

EYE CONTACT:

Flush eyes with large amounts of water. See physician immediately.

SKIN CONTACT:

Flush skin with large amounts of water. Use soap if available. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, consult physician.

INHALATION:

Remove person to fresh air. Administer oxygen or artificial respiration as needed. Call a physician immediately.

INGESTION:

If swallowed, DO NOT INDUCE VOMITING. Use a stomach pump. Call a physician immediately.

WORKPLACE EXPOSURE CONTROLS:

PERSONAL PROTECTION:

Safety glasses are recommended for all workplace conditions. Solvent resistant gloves are recommended where prolonged skin exposure is expected. Other protective gear, including splash proof goggles or face shield, rubber boots, aprons, gauntlets, or rain gear should be worn depending on how the product is used.

VENTILATION:

None needed under normal use conditions. For enclosed areas, or where large amounts of the product are being used, the use of fans or other mechanical ventilation is recommended. An organic vapor mask should be used if the TLV is exceeded and a particle mask if the product is sprayed. DO NOT MIST THIS PRODUCT. Use coarse spray only.

SECTION 4 FIRE & EXPLOSION HAZARDS

FLASH POINT: 144°F TCC

FLAMMABLE LIMITS: not determined

AUTOIGNITION TEMPERATURE: not determined

GENERAL HAZARD:

Combustible liquid. Can form combustible mixtures at or above the flash point.

Containers can rupture and explode under fire conditions due to pressure and vapor buildup.

FIRE FIGHTING:

Either allow fire to burn out under controlled conditions or extinguish with water, foam, or dry chemical.

Cool exposed containers with water spray.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, fumes, and oxides of carbon.

SECTION 5 SPILL CONTROL MEASURES

LAND SPILL:

Eliminate sources of ignition. For small spills, use absorbent material such as towels or absorbent powders. Put all material into proper waste disposal container with lid tightly covered. **Solvent soaked materials may spontaneously combust.** For larger spills, dike spill, recover free liquid, and use absorbent material to dry area. Rinse area with water. Put all material into appropriate waste containers.

WATER SPILL:

Remove product from water surface by skimming or with suitable absorbents. This product contains surfactants which will cause it to disperse in water. Localized high concentrations of this product may cause fish kills, but no persistent or long term effects will result. Check with local environmental regulatory agencies for reporting requirements.

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SECTION 6 HANDLING & STORAGE

STORAGE TEMPERATURE, °F: ambient. DO NOT STORE ABOVE 120 Deg. F.

GENERAL: Keep away from heat sources, open flames, and other ignition sources. Do not store near strong oxidants.

SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT, °F: VAPOR PRESSURE, mm Hg at 20°C:

ove 300 less than 1

EVAPORATION RATE, ether = 1: VAPOR DENSITY (Air = 1):

less than 0.1 greater than 4

SOLUBILITY IN WATER: WT% ORGANIC VOLATILES:

emulsifies about 97

SPECIFIC GRAVITY at 75°F:

1.044

pH:
not applicable

ODOR AND APPEARANCE:

clear light amber liquid with citrus odor

SECTION 8 REACTIVITY DATA

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents.

SECTION 9 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):

PROPER SHIPPING NAME:

NONHAZARDOUS (nonregulated) MATERIAL

HAZARD CLASS: None

IDENTIFICATION NUMBER: None PACKING GROUP: None

LABEL: not required

FLASH POINT: 144°F TCC pH: not applicable

TSCA: The ingredients in this product are listed on the TSCA inventory.

CERCLA:

This product contains no reportable CERCLA materials. Contact local authorities to determine if there may be other local reporting requirements.

RCRA HAZARD CLASS:

Nonhazardous waste

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SARA TITLE III:

311/312 HAZARD CATEGORIES:

Acute health, Fire

313 REPORTABLE INGREDIENTS:

None

NEW JERSEY RIGHT-TO-KNOW INFORMATION:

This product contains aliphatic esters (CAS# 1119-40-0, 627-93-0, and 106-65-0), d'limonene (CAS# 5989-27-5), dipropylene glycol monomethyl ether (CAS# 34590-94-8), and primary alcohol ethoxylate (CAS# 34398-01-1).

CALIFORNIA PROPOSITION 65 INFORMATION:

This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION:

Is there a photochemically reactive material present? Yes What is the % by volume of photochemically reactive material? about 10 What is the VOC content? 1010 g/l What is the vapor pressure of VOC's? less than 1 mm Hg

SECTION 10 NOTES

HAZARD RATING SYSTEMS:

	HMIS	NFPA	KEY
HEALTH	1	1	4 = Severe
FLAMMABILITY	2	2	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

REVISION SUMMARY:

SUPERSEDES ISSUE DATE:

Change in Section 9 February 4, 2004

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000

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