

MSDS Document

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Heptane

1. Chemical Product and Company Identification

HMIS CODES
Health 2
Flammability 2
Reactivity 0
Personal Protection E

MANUFACTURER'S NAME

DISTINCTIVE IMAGE

50 Commerce Parkway

Hodgenville, KY 42748

INFORMATION TELEPHONE NO. (800) 223-1918

EMERGENCY TELEPHONE NO. CHEMTREC: 800-424-9300 (Within USA)
001-703-527-3887 (Outside the USA)

2. Composition and Information on Ingredients

| Ingredient | CAS Number | Weight % | | |
|-------------------------------|------------|----------|-----------|--|
| Light Hydrotreated Distillate | 68410-97-9 | 100 % | ACGIH TLV | |
| | | | PEL STEL | |

3. Hazards Identification

*****EMERGENCY OVERVIEW*****

- * WARNING: Flammable Liquid and Vapor. The Flash Point is <100 degrees F.
- * This product is a clear, water-white, light hydrocarbon liquid.
- * It has a solvent petroleum odor. The product floats on water.
- * When burned the product produces carbon monoxide and other asphyxiants during combustion.
- * Harmful if inhaled and may cause delayed lung injury.
- * Aspiration hazard if swallowed - can enter lungs and cause damage.
- * Keep away from heat, sparks, and flame.
- * Avoid breathing vapor. Use ventilation to keep vapor below exposure limits.
- * Avoid contact with eyes, skin and clothing. Material splashed into the eyes will irritate tissues. Gently flush material from eyes with clean water.
- * Unprotected exposure to this product will cause skin dryness.
- * Remove product soaked clothing and wash with mild soap.
- * As with any petroleum product, avoid mixing this product with strong oxidizers.
- * This product is not listed on the NTP, IARC, OSHA, or ACGIH lists of suspected/confirmed carcinogens.
- * This product may be toxic to fish but will be toxic to birds and wildlife through ingestion during pelage cleaning.
- * This product is readily biodegradable in the presence of air and sunlight.
- * Spilled material is slippery and may cause falls.

*****END OF EMERGENCY OVERVIEW *****

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

EYES

Tests on similar materials suggest acute irritation be expected.

SKIN

Tests on similar materials indicate acute irritation is expected to occur upon short-term exposure, chronic dermatitis on prolonged contact.

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INGESTION

ACUTE ASPIRATION HAZARD. Tests on similar materials indicate possibility of the following symptoms: headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, convulsions, and loss of consciousness.

INHALATION

Tests on similar material indicate the possibility of the following symptoms: headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.

CHRONIC (CANCER INFORMATION)

Prolonged and/or repeated contact with this material may produce skin irritation and inflammation.

Carcinogen listed by : National Toxicology Program (No)

CHRONIC (CANCER INFORMATION) - Continued

I. A. R. C. (NO)

OSHA (NO)

ACGIH (NO)

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Personnel with pre-existing skin disorders should avoid contact with this product.

4. First Aid Information

EYES

Flush eyes immediately with water for at least 15 minutes or until irritation subsides, occasionally lifting lower and upper lids. Get medical attention promptly.

SKIN

Wash thoroughly with soap and water. Immediately remove contaminated clothing and wash before reuse. If irritation or rash develops, obtain medical assistance. Immediately remove soaked clothing.

INGESTION

CALL PHYSICIAN IMMEDIATELY. Do not induce vomiting except at the instruction of a physician. Never give anything by mouth to an unconscious person.

INHALATION

Remove patient to fresh air and consult a physician. If breathing is difficult, give oxygen. If not breathing give artificial respiration.

5. Fire Fighting Measures

FLAMMABLE PROPERTIES

FLASH POINT: <0°F ,18°C Tag Closed Cup D56

AUTOIGNITION: Not available

FLAMMABILITY CLASS: 1B

LOWER EXPLOSIVE LIMIT (%): 1.1

UPPER EXPLOSIVE LIMIT (%): 6.7

FIRE AND EXPLOSION HAZARDS

Can form flammable mixtures with air and flash at room temperature or upon slight heat application. Vapors are heavier than air and may travel considerable distance. Explosion hazard in confined spaces if exposed to ignition source. Mists or sprays may be flammable below oil's normal flash point. Keep away from heat or open flame.

EXTINGUISHING MEDIA

Dry Chemical, carbon dioxide, and foam. NOTE: Water, fog and foam may cause frothing and spattering. Water stream may spread fire.

FIRE FIGHTING INSTRUCTIONS

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Use water to cool containers exposed to flames. Do not enter enclosed or a confined work space without proper protective equipment. Fire fighting personnel should wear respiratory protection(positive pressure if available). If leak or spill has not ignited, use water spray to disperse the vapors. Products of combustion include fumes, smoke and carbon monoxide.

6. Accidental Release Measures

Evacuate area and shut off ignition source. Contain spill and keep from entering waterways or sewers. Use personal protective equipment. Advise EPA; state agency if required. Absorb on inert material. Shovel, sweep or vacuum spill and place in closed container for disposal.

7. Handling and Storage

HANDLING: Keep product away from high energy ignition sources, heat, sparks, pilot lights, static electricity, and open flame. Avoid contact with skin. Avoid inhalation of vapors or mists. Use in well-ventilated area away from all ignition sources. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Store in a cool area. Store as OSHA Class IB flammable liquid.

SPECIAL PRECAUTIONS: To prevent and minimize fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system.

Electrical equipment and fittings must comply with local fire prevention regulations for this class of product. Use the correct grounding procedures. Refer to national or local regulations covering safety at petroleum handling and storage areas for this product.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

WORK/HYGIENIC PRACTICES

Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Launder or discard contaminated shoes and leather gloves.

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS

Use adequate ventilation to keep oil mists of this material below applicable standard(s). See Section on occupational exposure limits.

EYE/FACE PROTECTION

Safety glasses, splash goggles, or face shield as appropriate. Have suitable eye wash water available.

SKIN PROTECTION

Avoid prolonged and/or repeated skin contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves are neoprene; nitrile; viton.

RESPIRATORY PROTECTION

Up to 1000 ppm, half mask organic vapor respirator. Up to 5000 ppm, full face organic vapor respirator or full face supplied air respirator. Greater than 5000 ppm, fire fighting, or unknown concentration, self-contained breathing apparatus with positive pressure should be used.

OTHER/GENERAL PROTECTION

If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance

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with 29 CFR 1910.1200 (Hazard Communication Standard). Maintain local or dilution ventilation to keep air concentration below 100 ppm. Loading, unloading, tank gauging, etc., remain upwind. Request assistance of safety and industrial hygiene personnel to determine air concentrations.

This product contains:

| INGREDIENT | CAS # | EXPOSURE LIMITS | PERCENT BY VOLUME |
|-------------|----------|---------------------------------------|-------------------|
| Hexane, | 110-54-3 | OSHA TWA 500 ppm ACGIH TWA 50 ppm | |
| Heptane | 142-82-5 | OSHA TWA 500 ppm ACGIH TWA 400 ppm | |
| Cyclohexane | 110-82-7 | OSHA TWA 300 ppm ACGIH TWA 300 ppm | |

9. Physical and Chemical Properties

APPEARANCE

Clear liquid.

ODOR

Petroleum Naphtha.

ODOR THRESHOLD

N.D.

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid

BOILING POINT: IBP >180 D86°F IBP >86 D86°C

MELTING POINT: Not Available.

VAPOR PRESSURE: 1.66 psi @ 68°F

VAPOR DENSITY(air=1): 3.2

SPECIFIC GRAVITY @ 60°F(water=1): 0.72

MOLECULAR WEIGHT: 106.3

SOLUBILITY (H₂O): negligible in water

PERCENT VOLATILES:100%

VISCOSITY: Not Available.

Physical data may vary slightly to meet specifications.

10. Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY)

Sources of ignition.

INCOMPATIBLE MATERIALS

Strong oxidizers.

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Calumet 180-210, <1%

HAZARDOUS DECOMPOSITION PRODUCTS

Incomplete combustion may produce fumes, smoke, carbon monoxide and other asphyxiants.

HAZARDOUS POLYMERIZATION: will not occur

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11. Toxicological Information

Skin effects

May cause irritation or dermatitis with prolonged and repeated contact.

Oral effects

Tests on similar materials indicate an order of acute oral toxicity.

Inhalation effects

Acute toxicity expected on inhalation.

Medical conditions aggravated by overexposure

Dermatitis and sensitive skin - this product is not listed as carcinogenic or a potential carcinogen by the national toxicology program, by the I.A.R.C. monographs or by OSHA. Nevertheless, good industrial hygienic practices are recommended.

12. Ecological Information

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress to birds and mammals through ingestion during pelage grooming. This product is rapidly biodegradable. Biodegradation is possible within 90 to 120 days in aerobic environments at temperatures above 70o F (21o C).

13. Disposal Considerations

Product as supplied does not meet the characteristics of a hazardous waste as defined in 40 CFR 261.21-24. If mixed with other products, waste mixture must be characterized. DO NOT dispose of this product in drains or storm sewers. DO NOT dispose of this product in a landfill without prior solidification. Waste product should be recycled. Consider waste brokering.

14. Transportation Information

PROPER SHIPPING NAME: Petroleum Distillates, n.o.s., Class 3, UN 1268, PG II

HAZARD CLASS: Class 3 Flammable Liquid

DOT IDENTIFICATION NUMBER: UN1268

DOT SHIPPING LABEL: DOT Hazardous material

15. Regulatory Information

U.S. FEDERAL REGULATORY INFORMATION

SARA 302 Threshold Planning Quantity: NOT APPLICABLE

SARA 304 Reportable Quantity: NOT APPLICABLE

SARA TITLE III - Section 311/312 Hazard classes:

- Immediate/Acute Health Effects: yes
- Delayed/Chronic Health Effects: no
- Fire Hazard: yes
- Sudden Release of Pressure Hazard: no
- Reactivity Hazard: no

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory of chemicals.

SARA TITLE III - Section 313 Supplier notification:

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:

* Hexane 110-54-3 up to 5%

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* Cyclohexane 110-82-7 up to 50%

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): No chemicals in this product are subject to the reporting requirements of CERCLA Section 101(14)(F). When this product is used in a mixture, or as an ingredient in another product, or in a manufacturing operation, the petroleum exclusion may terminate and an accidental spill may require reporting to the National Response Center.

STATE LIST DATA - This product contains Hexane CAS 110-54-3 and Cyclohexane 110-82-7 which are on the following state lists:

Florida Toxic Substance

Massachusetts Hazardous Substance

Pennsylvania Hazardous Substance

Minnesota Hazardous Substance

New Jersey RTK Hazardous Substance

New York List of Hazardous Substances

Washington Air Contaminant

CANADIAN REGULATORY INFORMATION

The components of this product are listed on the Canadian (DSL) Domestic Substances List.

EUROPEAN (ECC) REGULATORY INFORMATION

The components of this product are listed on the European Inventory of Existing Commercial Substances. EINECS# 270-093-2

16. Other Information

SUPERCEDES MSDS DATED: 07/23/03

DATE REVISED:06/12/07

Updated sections: 5,8,9,14 and 15.

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