

NATIONAL REFRIGERANTS™

Material Safety Data Sheet

n-PENTANE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: n-PENTANE
CHEMICAL FAMILY: Paraffin Series Hydrocarbon
DISTRIBUTOR: National Refrigerants, Inc.
661 Kenyon Avenue
Bridgeton, New Jersey 08302

FOR MORE INFORMATION CALL:
(Monday-Friday, 8:00am-5:00pm)
1-800-262-0012

IN CASE OF EMERGENCY CALL:
CHEMTREC: 1-800-424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>% VOLUME</u>	<u>TLV-ACGIH</u>	<u>CAS NUMBER</u>
n-PENTANE	100	1000 ppm	109-66-0

*** Physical Hazard Due to Flammable Nature. Flammable When Combined With Air ***

3. HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE

INGESTION: Aspiration Hazard!

INHALATION: Inhalation of vapor may produce anesthetic effects and feeling of euphoria. Prolonged overexposure can cause rapid breathing, headache, dizziness, narcosis, unconsciousness, and death from asphyxiation, depending on concentration and time of exposure.

SKIN CONTACT: Can cause moderate skin irritation.

EYE CONTACT: Can cause severe irritation, redness, tearing, blurred vision, and possible freeze burns.

4. FIRST AID MEASURES

INGESTION: Do not induce vomiting. Contact a physician immediately.

INHALATION: Remove to fresh air. If breathing has stopped, restore breathing at once. Administer oxygen and get medical help.

SKIN CONTACT: For liquid contact, warm areas gradually and get medical attention if there is evidence of tissue damage. Flush area with plenty of water.

NATIONAL REFRIGERANTS™

n-Pentane

EYE CONTACT: For liquid contact, irrigate with running water for minimum of 15 minutes. Consult physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT (METHOD): -40 F (estimated)
UPPER EXPLOSIVE LIMIT (vol.) gas in air: 7.8%
LOWER EXPLOSIVE LIMIT (vol.) gas in air: 1.4%

EXTINGUISHING MEDIA:

Dry Chemical Extinguisher (B-C), Water

SPECIAL FIRE FIGHTING PROCEDURES:

Stop the release of materials if possible. Cool the vapor space of the storage container with water spray. Avoid accumulation of unburned materials. Remove personnel in general area. Observe maximum isolation when extinguishing fire. Expansion of liquid and change of state from liquid to vapor will allow combustible mixture to encompass a large area.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors are heavier than air and may travel along the ground or may be moved by ventilation systems and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Contain the spill. Eliminate sources of ignition. Use water spray to reduce vapors. For small spills, take up with absorbent material. If confined space – use self-contained breathing apparatus. Consult local fire authorities.

7. HANDLING AND STORAGE

Watch for leaks and spills. Keep containers sealed and store in cool, well-ventilated area. Bond and ground during liquid transfer. Provide means to control leaks and spills. Protect from sources of ignition. Prohibit smoking in areas of storage or use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION

Mechanical: Provide as needed to keep concentration in air below TLV and LEL
Local Exhaust: Continuous ventilation recommended.
Special: Explosion proof fans and motors.

RESPIRATORY PROTECTION: NIOSH approved self-contained breathing apparatus
PROTECTIVE GLOVES: Impervious, insulated gloves recommended
EYE PROTECTION: Face shield or goggles recommended
OTHER: Impervious clothing for prolonged or repeated contact

NATIONAL REFRIGERANTS™

n-Pentane

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR & APPEARANCE	Clear, Colorless liquid with sweet petroleum odor.
SOLUBILITY IN WATER @ 70 Deg. F	0%
SPECIFIC GRAVITY (H₂O=1.00):	0.631
BOILING RANGE:	97 Deg. F
PRESENT VOLATILE BY VOLUME:	100%
VAPOR PRESSURE @ 70 Deg. F:	8.6 psia
VAPOR DENSITY (air = 1.00):	2.5
EVAPORATION RATE:	> 1 (Ethyl Ether = 1.0)

10. STABILITY AND REACTIVITY

STABILITY:

This product is stable.

INCOMPATIBILITY (Material to Avoid):

None

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Volatile Hydrocarbon Vapors

HAZARDOUS POLYMERIZATION:

Can not occur.

CONDITIONS TO AVOID:

High Heat, Sparks & Open Flames

11. ECOLOGICAL INFORMATION

No data given

12. DISPOSAL CONSIDERATIONS

- (1) Mechanical recovery
- (2) Burn under controlled conditions
- (3) Deposit contaminated absorbent in designated landfill

OTHER DISPOSAL CONSIDERATIONS:

Disposal must comply with federal, state, and local disposal laws

13. TRANSPORT INFORMATION

US DOT PROPER SHIPPING NAME:	Pentanes
US DOT HAZARD CLASS:	3
US DOT ID NUMBER:	UN 1265
PACKING GROUP:	PG II
LABELED/PLACARDED	Flammable Liquid



n-Pentane

14. REGULATORY INFORMATION

The ingredients listed in section 2 are reported/included in the U.S. TSCA inventory and Canadian domestics substance list.

15. OTHER INFORMATION

OTHER INFORMATION: HMIS Classification: Health – 1, Flammability – 4, Reactivity – 0

National Refrigerants, Inc. believes that the information and recommendations contained herein (including data and statements are accurate as of the date hereof). NO WARRANTY OF FITNESS OR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANT ABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other methods of use of the product and of the information referred to herein are beyond the control of National Refrigerants. National Refrigerants expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.