

HEAVY DUTY PENETRATING OIL

Safety Data Sheet

SECTION 1: Product and company identification

Product name **HEAVY DUTY PENETRATING OIL**
Use of the substance/mixture Lubricant
Product code
Company Pioneer Research Corporation
3110 N. 19th Ave
Phoenix, AZ 85015
(602) 230-0012
Emergency number Chem Tel (800) 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

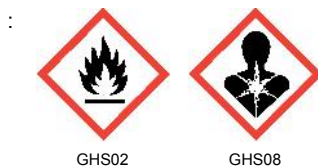
Flam. Aerosol 1 H222
Carc. 2 H351
Asp. Tox. 1 H304

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: Extremely flammable aerosol
May be fatal if swallowed and enters airways
Suspected of causing cancer

Precautionary statements (GHS-US)

: Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat, hot surfaces, open flames, sparks. - No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Wear eye protection, face protection, protective clothing, protective gloves
If swallowed: Immediately call a doctor, a POISON CENTER
If exposed or concerned: Get medical advice/attention
Do NOT induce vomiting
Store locked up
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
tetrachloroethylene	(CAS No) 127-18-4	40 - 60	Not classified
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS No) 64742-47-8	20 - 40	Flam. Liq. 4, H227 Asp. Tox. 1, H304

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Name	Product identifier	%	Classification (GHS-US)
CARBON DIOXIDE	(CAS No) 124-38-9	1 - 2.5	Compressed gas, H280

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
First-aid measures after inhalation	: Remove the victim into fresh air. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Wash with water and soap. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Immediately call a poison center or doctor/physician. Rinse mouth. Do not induce vomiting. Vomiting: prevent asphyxia/aspiration pneumonia.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: May cause drowsiness or dizziness. Headache. Nausea. Irritation of the eye tissue. Irritation of the nasal mucous membranes. Irritation to throat.
Symptoms/injuries after skin contact	: Irritation.
Symptoms/injuries after ingestion	: Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of aspiration pneumonia.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed. Keep watching the victim.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Alcohol-resistant foam. Water fog. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Contents under pressure. Pressurized container: may burst if heated.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions	: Move containers away from the fire area if this can be done without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Use water spray or fog for cooling exposed containers.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stay upwind/keep distance from source.
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6.1.1. For non-emergency personnel

Protective equipment	: Do not enter without an appropriate protective equipment. DO NOT touch spilled material.
Emergency procedures	: Evacuate unnecessary personnel. Ventilate spillage area. Advise local authorities if considered necessary.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent runoff from entering drains, sewers or waterways. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Eliminate every possible source of ignition. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if safe to do so. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to disperse the vapors.
Methods for cleaning up	: Absorb spillage to prevent material damage. Prevent dispersion by covering with non-combustible absorbent material. Following product recovery, flush area with water.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any incandescent material. Do not smoke while handling product. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. . Ground/bond container and receiving equipment. Avoid prolonged and repeated contact with skin. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash thoroughly after handling. Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Pressurized container. Do not puncture, incinerate or crush. Take precautionary measures against static discharge.
- Storage conditions : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- Incompatible materials : Open flame. Sources of ignition. Heat sources.
- Storage area : Aerosol 1.
- Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

tetrachloroethylene (127-18-4)

ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	CNS impair

CARBON DIOXIDE (124-38-9)

ACGIH	ACGIH TWA (ppm)	5000 ppm
ACGIH	ACGIH STEL (ppm)	30000 ppm
ACGIH	Remark (ACGIH)	Asphyxia

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. If exposure limits have not been established, maintain airborne levels to an acceptable level.
- Personal protective equipment : Protective goggles. Protective clothing. Gloves. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



- Materials for protective clothing : chemical resistant apron.
- Hand protection : Protective gloves.
- Eye protection : Wear eye/face protection.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Full face piece respirator (organic vapors).
- Thermal hazard protection : Use appropriate personal protective equipment when risk assessment indicates this is necessary.
- Consumer exposure controls : When using do not smoke. Use good personal hygiene practices. Wash hands immediately after handling the product. Take off contaminated clothing and wash before reuse. Keep away from food and drink.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Aerosol.
- Odor : No data available
- Odor threshold : No data available
- pH : No data available

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: 250.34 °F Estimated
Flash point	: 174.2 °F Estimated
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.25 g/cm³
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: 236 °C Estimated
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: < 20 cSt
Viscosity, dynamic	: No data available
VOC content	: 58.88 % Estimated

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)

LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Literature)
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

tetrachloroethylene (127-18-4)

IARC group	2A - Probably Carcinogenic to Humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after skin contact	: Irritation.
Symptoms/injuries after ingestion	: Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of aspiration pneumonia.

SECTION 12: Ecological information

12.1. Toxicity

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

12.2. Persistence and degradability

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Persistence and degradability	Readily biodegradable in water. Adsorbs into the soil.

12.3. Bioaccumulative potential

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Log Pow	6 - 8.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. . Contents under pressure. Do not puncture, incinerate or crush. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Waste disposal recommendations	: Dispose of contents/container to comply with local/regional/national/international regulations.
Additional information	: Do not re-use empty containers. Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description	: UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1
UN-No.(DOT)	: UN1950
Proper Shipping Name (DOT)	: Aerosols flammable, (each not exceeding 1 L capacity)
Transport hazard class(es) (DOT)	: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
Hazard labels (DOT)	: 2.1 - Flammable gas



Marine pollutant	: Yes (IMDG only)
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DOT Packaging Non Bulk (49 CFR 173.xxx)	: None
DOT Packaging Bulk (49 CFR 173.xxx)	: None
DOT Special Provisions (49 CFR 172.102)	: N82

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DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A
DOT Vessel Stowage Other	: 25 - Shade from radiant heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

Additional information

Other information	: This product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.306.
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ADR

No additional information available

Transport by sea

UN-No. (IMDG)	: UN1950
Proper Shipping Name (IMDG)	: Aerosols, flammable
Class (IMDG)	: 2.1 - Flammable gases
Subsidiary risks (IMDG)	: 6.1(PGIII)
EmS-No. (1)	: F-D, S-U

Air transport

UN-No.(IATA)	: UN1950
Proper Shipping Name (IATA)	: Aerosols, flammable, containing substances in Division 6.1, Packing Group III
Class (IATA)	: 2.1 - Gases : Flammable
Packing group (IATA)	: III - Minor Danger
Subsidiary risks (IATA)	: 6.1(PGIII)

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

tetrachloroethylene	CAS No 127-18-4	40 - 60
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tetrachloroethylene (127-18-4)

Listed on SARA Section 313 (Specific toxic chemical listings)

RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
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California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Liq. 4	Flammable liquids Category 4
H222	Extremely flammable aerosol
H227	Combustible liquid
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways

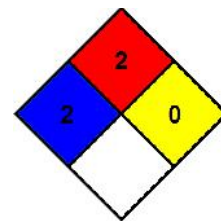
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H351

Suspected of causing cancer

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

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