



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name	Vacuum Pump Oil (4383-07, 4383-24, 4383-34, 4383-01)
CAS #	Mixture
Product Use	Lubricating vacuum pumps
Manufacturer	Nu-Calgon 2008 Altom Court St. Louis, MO 63146 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Emergency overview	MAY CAUSE EYE AND SKIN IRRITATION.
Potential short term health effects	
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	Direct contact with eyes may cause temporary irritation.
Skin	No adverse effects due to skin contact are expected.
Inhalation	No adverse effects due to inhalation are expected.
Ingestion	May cause stomach distress, nausea or vomiting.
Target organs	Skin. Eyes.
Chronic effects	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Signs and symptoms	Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Potential environmental effects	See section 12.

3. Composition/Information on Ingredients

Composition comments	None by WHMIS criteria.
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4. First Aid Measures

First aid procedures	
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestion	Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician	Treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Water Fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). Sand.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Not available
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Following product recovery, flush area with water. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

7. Handling and Storage

Handling	Use only with adequate ventilation. Avoid breathing vapours or mists of this product. Avoid contact with eyes, skin and clothing. When using do not eat or drink. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Keep container tightly closed.
Storage	Store in a closed container away from incompatible materials. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Exposure limits	Not applicable.
Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye/Face protection	Not normally required when used as directed. Safety glasses if eye contact is possible.
Hand protection	Not normally required when used as directed. If there is constant skin contact, rubber gloves are recommended.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance	Clear
Colour	Colourless
Form	Liquid.
Odour	Slight hydrocarbon
Odour threshold	Not available.
Physical state	Liquid.
pH	Not available
Freezing point	Not available.
Boiling point	> 137.78 °C (> 280 °F)
Pour point	-15 °C (5 °F)

Evaporation rate	Not available
Flash point	107.2 °C (225.0 °F) Cleveland open cup
Auto-ignition temperature	> 160 °C (> 320 °F) Not available
Flammability Limits in Air, Upper, % by Volume	< 10
Flammability Limits in Air, Lower, % by Volume	> 1
Heat of combustion	Not available.
Vapour pressure	< 0.5 mPa
Vapour density	> 1
Specific gravity	< 1
Partition coefficient (n-octanol/water)	> 6
Solubility (Water)	Negligible
Relative density	Not available.
Viscosity	48.65 mm ² /s
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidising agents.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Not available.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Effects of acute exposure	
Eye contact	Direct contact with eyes may cause temporary irritation.
Skin contact	No adverse effects due to skin contact are expected.
Inhalation	No adverse effects due to inhalation are expected.
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitisation	Non-hazardous by WHMIS criteria.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	Non-hazardous by WHMIS criteria.
Mutagenicity	Non-hazardous by WHMIS criteria.
Reproductive effects	Non-hazardous by WHMIS criteria.
Teratogenicity	Non-hazardous by WHMIS criteria.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	Not available.
Persistence and degradability	This product is not readily biodegradable.
Bioaccumulation/accumulation	Bioaccumulation potential.
Mobility in environmental media	Not available.
Environmental effects	Not available.
Aquatic toxicity	Not available.

Partition coefficient

> 6

Chemical fate information

Not available.

13. Disposal Considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

Waste from residues / unused productsDispose of in accordance with local regulations.
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS status

Not Controlled

Inventory status**Country(s) or region**

Canada

Inventory Name

Domestic Substances List (DSL)

On Inventory (Yes/No)*

Yes

Canada

Non-Domestic Substances List (NDSL)

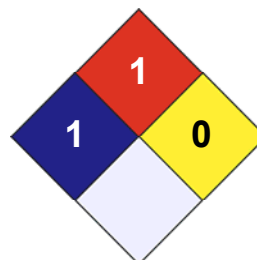
No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.