

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier Vacuum Pump Oil (4383-07, 4383-24, 4383-34, 4383-01)

Other means of identification Not available.

Recommended use Lubricating vacuum pumps

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Nu-Calgon Company name 2008 Altom Court Address St. Louis, MO 63146

United States

Telephone Phone: 314-469-7000 / 800-554-5499

E-mail info@nucalgon.com

Phone: 1-800-424-9300 (CHEMTREC) **Emergency phone number**

2. Hazards Identification

Physical hazards Not classified. Not classified. **Health hazards Environmental hazards** Not classified. **OSHA** defined hazards Not classified.

Label elements

None. **Hazard symbol** Signal word None.

The mixture does not meet the criteria for classification. **Hazard statement**

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/Information on Ingredients

Mixtures

Ingredients not identified are proprietary or non-hazardous by GHS criteria.

4. First Aid Measures

If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention. Inhalation Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain Eye contact

medical attention if irritation persists.

Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean Ingestion

forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is

convulsing.

Most important

symptoms/effects, acute and

delaved

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

#18405 Page: 1 of 6 Issue date 12-February-2014 **General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 5. Fire Fighting Measures Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Sand. Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media Specific hazards arising from During fire, gases hazardous to health may be formed. the chemical Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters Fire-fighting Move containers from fire area if you can do so without risk. equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods No unusual fire or explosion hazards noted. General fire hazards 6. Accidental Release Measures Personal precautions, Keep out of low areas. 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 equipment and protective clothing. For personal protection, see section 8 of the SDS. emergency procedures Methods and materials for This product is miscible in water. Stop the flow of material, if this is without risk. containment and cleaning up Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. **Environmental precautions** Avoid discharge into drains, water courses or onto the ground. 7. Handling and Storage Use good industrial hygiene practices in handling this material. Keep out of reach of children. Precautions for safe handling Store in a closed container away from incompatible materials. Store in original tightly closed container. Store away from incompatible materials (see Section 10 Conditions for safe storage, including any incompatibilities of the SDS). 8. Exposure Controls/Personal Protection Occupational exposure limits No exposure limits noted for ingredient(s). No biological exposure limits noted for the ingredient(s). **Biological limit values** Appropriate engineering Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, controls or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Individual protection measures, such as personal protective equipment Not normally required when used as directed. Safety glasses if eye contact is possible. Eye/face protection Skin protection Hand protection Not normally required when used as directed. If there is constant skin contact, rubber gloves are recommended. Wear suitable protective clothing. Other Respiratory protection No personal respiratory protective equipment normally required.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene 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 considerations

equipment to remove contaminants.

9. Physical and Chemical Properties

Clear **Appearance** Physical state Liquid. Liquid. **Form** Colorless Color

#18405 Page: 2 of 6 Issue date 12-February-2014 Odor Slight hydrocarbon
Odor threshold Not available.

pH Not available
Melting point/freezing point Not available.

Initial boiling point and boiling

> 280 °F (> 137.78 °C)

range

Pour point $5 \,^{\circ}\text{F} \, (-15 \,^{\circ}\text{C})$

Specific gravity < 1
Partition coefficient > 6

(n-octanol/water)

Flash point 225.0 °F (107.2 °C) Cleveland Open Cup

Evaporation rate Not available
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

Flammability limit - lower > 1

(%)

Flammability limit - upper < 10

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure < 0.5 mPa

Vapor density > 1

Relative density Not available.

Solubility(ies) Negligible

Auto-ignition temperature> 320 °F (> 160 °C)Decomposition temperatureNot available.Viscosity48.65 mm2/s

Other information

Flash point class Combustible IIIB

10. Stability and Reactivity

Reactivity This product may react with strong oxidizing agents.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Chemical stability Material is stable under normal conditions.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

May include and are not limited to: Oxides of carbon when heated to decomposition.

11. Toxicological Information

Information on likely routes of exposure

 Ingestion
 May cause stomach distress, nausea or vomiting.

 Inhalation
 No adverse effects due to inhalation are expected.

 Skin contact
 No adverse effects due to skin contact are expected.

 Eye contact
 Direct contact with eyes may cause temporary irritation.

 Inproms related to the
 Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Product Species Test Results

Vacuum Pump Oil (4383-07, 4383-24, 4383-34, 4383-01) (CAS Mixture)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg

Product Species Test Results

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Exposure minutesNot available.Erythema valueNot available.Oedema valueNot available.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Corneal opacity valueNot available.Iris lesion valueNot available.Conjunctival reddeningNot available.

value

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Chronic effects The finished product is not expected to have chronic health effects.

Further information This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability This product is not readily biodegradable.

Bioaccumulative potential Bioaccumulation potential.

Partition coefficient n-octanol / water (log Kow)

> 6

Mobility in soil Not available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulationsDispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose 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

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

US state regulationsCalifornia Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

Country(s) or region Inventory name

On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

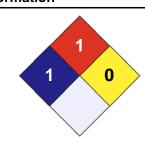
Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other Information







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.

12-February-2014

Further information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the

document.

Issue date

Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication

Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of

Chemicals (GHS).