# Vacuum pump oil（Asada Corporation SDS-047）

# SAFETY DATE SHEET (SDS)

Date：June 01, 2015

Revision 4：June 21, 2022

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

| | |
|---|---|
| Product name | Vacuum pump oil |
| Synonyms | VP005, VP083 |
| Chemical formula | Not applicable |
| Other identifiers | Not available |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| Relevant identified uses | Vacuum pump oil |
| Used of it discouraged | Not applicable |

### 1.3. Details of the supplier of the safety data sheet

| | |
|---|---|
| Registered company name | ASADA CORPORATION |
| Address | 3-60 Kamiida Nishi-machi, Kita-ku, Nagoya, Japan |
| Telephone | +81 52-911-7165 |
| Fax | +81 52-914-2062 |
| Website | https://www.asada.co.jp/ |
| E-mail | sales@asada.co.jp |

### 1.4. Emergency telephone number

| | |
|---|---|
| Society / Organization | ASADA CORPORATION |
| Emergency telephone number | +81 52-911-7165 |
| Other emergency telephone number | +81 52-914-1062 |

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

| | |
|---|---|
| Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 | Not applicable |

### 2.2. Label elements

| | |
|---|---|
| Hazard pictograms | Not applicable |
| Signal word | Not applicable |

**Hazard statements**
Not applicable

**Supplementary statements**
Not applicable

**Precautionary statements Prevention**
Not applicable

**Precautionary statements Response**
Not applicable

**Precautionary statements Storage**
Not applicable.

**Precautionary statements Disposal**
Not applicable.

### 2.3. Other hazards
REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1. Substances
A mixture of base oil and additives

### 3.2. Mixtures

| 1. CAS no.<br>2. EG no.<br>3. Index no.<br>4. REACH no. | %<br>[weight] | Name | Classification according to Regulation (EC) No 1272/2008 [CLP] and amendments | SCL/M factor | Nanoscale form particle properties |
|---|---|---|---|---|---|
| 1. 64742-54-7<br>2. Not available<br>3. Not available<br>4. Not available | >90wt% | Distillates (petroleum), hydrotreated heavy paraffinic | Not applicable | Not applicable | Not applicable |

# SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

| | |
|---|---|
| Eye contact | Rinse carefully for several minutes with water.<br>Rinse the eye after remove contact lenses if possible.<br>Please consulting medical advice and treatment. |
| Skin contact | Wash with plenty of soap and water and rinse thoroughly. |
| Inhalation | Move to a fresh air and take a position to breathe promptly. |
| Ingestion | Rinse mouth immediately and call a medical treatment. |

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

See Section 11

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

Treat symptomatically.

# SECTION 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable extinguishing media**

Foam, Water spray or fog, Dry chemical powder, Carbon dioxide

**Unsuitable extinguishing media**

Rod-shaped water injection

### 5.2. Special hazards arising from the substance or mixture

| | |
|---|---|
| Fire hazard | Combustible liquid |
| Reactivity in case of fire | Combustion probably produces a complex mixture of solid and liquid particles suspended in the air and gases including: metal oxides, nitrogen oxides (NOx), phosphorous oxides, carbon monoxide, carbon dioxide, unburned hydrocarbons (smoke), hydrogen sulphide and unidentified organic and inorganic compounds. Inhalation is highly dangerous. |
| Hazardous decomposition products in the event of fire | The incomplete combustion and thermolysis produce more or less toxic gases, such as carbon oxides |

### 5.3. Advice for firefighters

**Specific extinguishing measures:**

Move containers from fire area if not dangerous.

For extinguishing metal fires, the closed method or suffocation method are desirable.

**Protection of fire-fighters:**

Wear appropriate protective equipment such as air respirators when extinguishing fires.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

No action shall be taken involving any personal risk or without suitable training.
Evacuate surrounding areas.
Keep unnecessary and unprotected personnel from entering.
Avoid contact with skin and eyes.
Avoid breathing vapor or mist.
Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
Put on appropriate personal protective equipment.

**For emergency responders**

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

### 6.2. Environmental precautions

Be careful not to be released to rivers and cause any adverse effects on the environment.

### 6.3. Methods and materials for containment and cleaning up

| | |
|---|---|
| Minor spills | Absorb into dry earth or sand, and dispose by an appropriate method. |
| Major spills | Remove people from area and move away downwind.<br>Alert fire brigade and tell them location and nature of hazard.<br>Wear respiratory protection and protective gloves. |

### 6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

| | |
|---|---|
| Safe handling | Operation should be in a well-ventilated area.<br>Emergency response equipment should be ready for putting out the fire and leakage processing.<br>Avoid all physical contact, including inhalation.<br>Wear protective clothing if there is a risk of exposure. |
| Fire and explosion protection | See Section 5 |
| Other information | Post Warning signs of “no smoking” in workplace. |

### 7.2. Conditions for safe storage, including any incompatibilities

Container should be tightly closed. Storage must be away from heat, fire, dust, rain and incompatible. Storage barrels should be grounded, transfer should be equipotential connection (grounding clip must touch the bare metal). Stored in a place which is cool, dry, well ventilated and sunlight unable to exposure directly. Stored in suitable containers which is labeled and avoid vessel damage. Containers and empty bucket should be sealed. Stored in a proper and qualified storage room, storage cabinets or storage buildings. Storage temperature and pressure: normal temperature and pressure.

| | |
|---|---|
| Hazard categories in according with Regulation (EC) No. 1272/2008 | Not available |
| Qualifying quantity (tons) of dangerous substances as referred to in Article 3 (10) for the application of | Not available |

### 7.3. Specific end uses

See Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

**Occupational Exposure Limits**

Not available

**Emergency limits**

| Ingredient | Stipulation | Contact/exposure duration | Contact/exposure limits |
|---|---|---|---|
| Mineral oil mist | ACGIH | TWA | 5 mg/m$^3$ |
| | ACGIH | STEL | 10 mg/m$^3$ |

### 8.2. Exposure controls

| | |
|---|---|
| 8.2.1. Appropriate engineering controls | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.<br>The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard “physically” away from the worker and ventilation that strategically “adds” and “removes” air in the work environment. |
| 8.2.2. Personal protection | Not available |
| Eye and face protection | If contact is likely, safety glasses with side shields are recommended. |
| Skin protection | See Hands/Feet protection |
| Hands/Feet protection | Long-term exposure to Fluid may cause irritation to skin with redness and pain. Wear appropriate protective gloves. (Glove material is Chlorinated rubber, polyvinyl alcohol, elastomer, chloride, chlorinated polyethylene elastomer, neoprene, polyvinyl chloride (PVC), poly (amino ethyl for mate, etc.) |
| Body protection | See other protection |
| Other protection | No special equipment needed when handling small quantities.<br>Overalls, Barrier cream, Eyewash unit |

### 8.2.3. Environmental exposure controls

See Section 12

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

| | | | |
|---|---|---|---|
| Physical state | Liquid | pH (as supplied) | Not available |
| Color | Colorless and transparent | Kinematic viscosity ($mm^2/s$) | (40℃)：41.4~50.6 |
| Odor | Characteristic of Petroleum | Viscosity index | 112 |
| Odor threshold | Not available | Solubility | Insoluble in water |
| Melting point/ Freezing point (℃) | Not available | Partition coefficient: n-octanol/water | Not available |
| Initial boiling point and boiling range (℃) | Not available | Vapor pressure (kPa) | Not available |
| Flammability | Not available | Relative density | Not available |
| Upper explosive limit (%) | Not available | Relative vapor density | Not available |
| Lower explosive limit (%) | Not available | Particle properties | Not available |
| Flash point (℃) | 232 | Pour point（℃） | -10 |
| Auto-Ignition temperature(℃) | Not available | Ultimate vacuum (kPa) | $1.9\times10^{-3}$ |
| Decomposition temperature | Not available | | |

### 9.2. Other information

Not available

## SECTION 10: STABILITY AND REACTIVITY

| | |
|---|---|
| 10.1. Reactivity | Stable under recommended transport or storage. |
| 10.2. Chemical Stability | Stable at room temperature<br>May play a harmful response under special conditions |
| 10.3. Possibility of hazardous reactions | React with strong oxidizers |
| 10.4. Conditions to avoid | Avoid exposure to moisture, heat, flame, extreme temperatures, sunlight, and incompatible materials. |
| 10.5. Incompatible materials | Halogens, Strong acids, Alkalis, Oxidizers |
| 10.6. Hazardous decomposition products | Carbon monoxide may be produced when burned. |

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

| | |
|---|---|
| Inhaled | The substance is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). If inhalation of vapors or mists, may cause irritation of the throat with a feeling of tightness in the chest. |
| Ingestion | The substance has not been classified as “harmful if swallowed” by EC Directives or other classification systems. Swallowing it may cause digestive discomfort. |
| Skin contact | The substance is unlikely to cause irritant dermatitis as described in EC Directives. Skin should not be exposed to this liquid if skin is bruised or inflamed. Long-term or continuous contact with the skin without proper cleaning maybe block the pores of the skin, and cause Fat sex acne/folliculitis disease, etc. |
| Eye | The substance is not considered an irritant (as classified under EC Directives). Direct eye contact is expected to be slightly irritating and redness. |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); exposure by all routes should be minimised as a matter of course. |

| | | |
|---|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | Toxicity | Irritation |
| | Acute peroral toxicity Low toxicity expected：<br>LD50(rat) > 5000mg/kg<br>Acute dermal toxicity Low toxicity expected：<br>LD50(rat) > 5000 mg/kg<br>Acute inhalation toxicity No data available | Not available |

Legend Information provided on the basis of the component and toxicity data of similar products.

| | | | |
|---|---|---|---|
| Acute toxicity | ✘ | Carcinogenicity | ✘ |
| Skin irritation/corrosion | ✘ | Reproductive toxicity | ✘ |
| Serious eye damage/irritation | ✘ | STOT-Single exposure | ✘ |
| Respiratory or skin sensitisation | ✘ | STOT-Repeated exposure | ✘ |
| Germ cell mutagenicity | ✘ | Aspiration Hazard | ✘ |

Legend ✘ Date either not available or does not fill the criteria for classification
✔ Date available to make classification

**Remark:** The Used oil may contain harmful impurities which accumulated during use; Concentration of such harmful impurities will depend on use, May present risks to health and the environment on when disposal. All used oil should be handled carefully and avoid contact with the skin as much as possible.

## 11.2. Information about other hazards

### 11.2.1. Endocrine disrupting properties

Not available

### 11.2.2. Other information

See Section 11.1.

## SECTION 12: ECOLOGICAL INFORMATION

No special determine ecotoxicological data for this product. The following information based on knowledge of the components and the ecotoxicology of similar products.

### 12.1. Toxicity

The mixture with poor solubility, May cause physical fouling of aquatic organisms.
Expected nontoxic: LL/EL/IL50 >100 mg/L (For aquatic organisms )

### 12.2. Persistence and degradability

| Ingredient | Persistence: water/soil | Persistence: air |
|---|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | Not readily biodegradable. Major constituents are inherently biodegradable, but the product contains some of component that may persist in the environment. | Not readily biodegradable. Major constituents are inherently biodegradable, but the product contains some of component that may persist in the environment. |

### 12.3. Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | Contains components with the potential to bioaccumulate. |

### 12.4. Mobility in soil

| Ingredient | Mobility |
|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | If into the soil, it will be absorbed by the soil particles and can’t be flowing. |

### 12.5. Results of PBT and vPvB assessment

| | P | B | T |
|---|---|---|---|
| Relevant available date | Not available | Not available | Not available |
| PBT | ✗ | ✗ | ✗ |
| vPvB | ✗ | ✗ | ✗ |

| | |
|---|---|
| PBT criteria met? | Not applicable |
| vPvB | Not applicable |

### 12.6. Endocrine disrupting properties

Not available

### 12.7. Other adverse effects

Not available.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

| | |
|---|---|
| Products / Packaging disposal | Products: Recovery or recycling as far as possible. It should be evaluate the toxicity and physicochemical properties of the materials in order to develop an appropriate waste classification and disposal methods. Waste oil should be given to the waste oil handing agencies, not disposal in the environment, in drains or water courses. Disposal must be in accordance with applicable regional, national and local laws and regulations.<br><br>Packaging: Disposed by authorized waste collector or contractor as far as possible. Disposal must be in accordance with applicable regional, national and local laws and regulations. |
| Waste treatment options | Not available |
| Sewage disposal options | Not available |

## SECTION 14: TRANSPORT INFORMATION

**Danger label**

| | |
|---|---|
| Marine pollutant | Not |

**Land transport (ADR): NOT REGULATED UNDER FOR DANGEROUS SUBSTANCES**

| | | |
|---|---|---|
| 14.1. UN number | Not applicable | |
| 14.2. UN proper shipping name | Not applicable | |
| 14.3. Transport hazard classes | Class | Not applicable |
| | Sub-risk | Not applicable |
| 14.4. Packing group | Not applicable | |
| 14.5. Environmental hazards | Not applicable | |
| 14.6. Special precautions for user | Hazard label | Not applicable |
| | Classification code | Not applicable |
| | Danger label | Not applicable |
| | Special provisions | Not applicable |
| | Limited quantity | Not applicable |
| | Tunnel restriction code | Not applicable |

**Air transport (ICAO-IATA/DGR): NOT REGULATED UNDER FOR DANGEROUS SUBSTANCES**

| | | |
|---|---|---|
| 14.1. UN number | Not applicable | |
| 14.2. UN proper shipping name | Not applicable | |
| 14.3. Transport hazard classes | ICAO/IATA class | Not applicable |
| | ICAO/IATA subsidiary hazard | Not applicable |
| | ERG code | Not applicable |

| | | |
|---|---|---|
| 14.4. Packing group | Not applicable | |
| 14.5. Environmental hazards | Not applicable | |
| 14.6. Special precautions for user | Classification code | Not applicable |
| | Special provisions | Not applicable |
| | Limited quantities | Not applicable |
| | Required devices | Not applicable |
| | Fire cone number | Not applicable |

**Sea transport (IMDG Code/GGVSee): NOT UNDER REGULATED FOR DANGEROUS SUBSTANCES**

| | | |
|---|---|---|
| 14.1. UN number | Not applicable | |
| 14.2. UN proper shipping name | Not applicable | |
| 14.3. Transport hazard classes | IMDG/GGVSee class | Not applicable |
| | IMDG subsidiary hazard | Not applicable |
| 14.4. Packing group | Not applicable | |
| 14.5. Environmental hazards | Not applicable | |
| 14.6. Special precautions for user | EMS number | Not applicable |
| | Special provisions | Not applicable |
| | Limited quantities | Not applicable |

**Inland waterway transport (ADN): NOT REGULATED UNDER FOR DANGEROUS SUBSTANCES**

| | | |
|---|---|---|
| 14.1. UN number | Not applicable | |
| 14.2. UN proper shipping name | Not applicable | |
| 14.3. Transport hazard classes | Not applicable | |
| 14.4. Packing group | Not applicable | |
| 14.5. Environmental hazards | Not applicable | |
| 14.6. Special precautions for user | Classification code | Not applicable |
| | Special provisions | Not applicable |
| | Limited quantities | Not applicable |
| | Required devices | Not applicable |
| | Fire cone number | Not applicable |

### 14.7. Transport in bulk according to annexⅡ of MARPOL and the IBC Code

Not applicable

### 14.8. Bulk transport according to MARPOL Annex V and the IMSBC Code

| Product name | group |
|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | Not applicable |

### 14.9. Bulk transport according to the ICG Code

| Product name | Ship type |
|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | Not applicable |

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Please observe the local government laws and regulations on chemicals health, hygiene and safety.
Not classified under GB13690 standards.

**References:**

GB 6944-2005: Safety Data Sheet Content and order of dangerous chemicals.
GB / T 16483-2008: Safety Data Sheet Content and order.
GB 13690-1992: Common classification of hazardous chemicals and signs.
GB 12268-2005: List of dangerous chemicals.
GBZ 2.1-2007: Workplace Occupational exposure limits for hazardous chemicals harmful factors

### 15.2. Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: OTHER INFORMATION

This product is only used as recommended applications, if have any other applications, please contact the manufacturers. This information is based on our current knowledge as drafted, the purpose is only from health, safety and environmental provisions to describe the product. This information is not a guarantee that the product composition given performance.