

SAFETY DATA SHEET (SDS)

Revision Date: 2020/12/8

1. PRODUCT AND COMPANY IDENTIFICATION

Product name **BARREL VAC 46T**
Supplier MATSUMURA OIL CO., LTD.
Address 2-31, 2-Chome, Meiwadori, Hyogoku, Kobe, Japan.
Section Technical section
Phone number 81-78-671-2933
Fax number 81-78-652-2629
Emergency phone number 81-78-671-2933 (Technical section)
Registration time Monday - Friday, 9:00 - 17:30
Mail address tech@matsumura-oil.co.jp
Recommended use of the product and restrictions on use Vacuum pump oil
SDS No. V008B(E)

2. HAZARD IDENTIFICATION

GHS classification Not applicable for GHS classification.
GHS label elements
Hazard symbols None
Signal word None
Hazard statement None
Precautionary statement
[Prevention] None
[Response] None
[Storage] None
[Disposal] None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Substance
Chemical name Petroleum hydrocarbon
Concentration of ingredients Petroleum hydrocarbon 100%
Molecular formula No data
CAS number Non-disclosure

4. FIRST-AID MEASURES

IF INHALED Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN Wash with plenty of soap and water.
IF IN EYES Rinse with water for 15minute, and get medical attention.
IF SWALLOWED Immediately call a POISON CENTER or doctor/physician. DO NOT induce vomiting.
Most important symptoms/effects, acute and delayed
1) It may have diarrhea and vomit if swallowed.
2) Contact may cause eye irritation including stinging, watering and redness.
3) Contact may cause skin irritation including redness, and a burning sensation.
4) When mist is inhaled, feeling may worsen.
Protection of first-aiders Not available.
Special notes to physicians Not available.

5. FIRE-FIGHTING MEASURES

Extinguishing media	1) Use water fog, foam, dry chemical or carbon dioxide (CO ₂) to extinguish flames. 2) Initial fire; Use powder and carbon dioxide extinguishing media. 3) In the case of a big fire; It is effective to intercept air using fire foam.
Inappropriate extinguishing media	Straight Streams of Water. It may spread the fire over a larger area.
Special remarks on fire hazards	No information available.
Special fire-fighting procedures	1) Intercept the source of combustion to the origin of a fire. 2) Waters the surrounding equipment etc. to cool it. 3) Entry other than the persons concerned is forbidden a fire outbreak place.
Protection for fire-fighter	In the case of fire fighting, it carries out from the windward, and it certainly wears protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear protective gloves and eye/face protection.
Environmental precautions	1) Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. 2) In the case of marine, when using a medicine, you must be what suited the technical standard established law.
The removal method	1) The surrounding source of ignition is removed promptly. 2) Clean-up Methods - Small Spillages: Absorb liquid with sand or earth. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations. 3) Clean-up Methods - Large Spillages: Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Dispose of as for small spills. 4) In the case of marine, use oil fences to prevent the diffusion, suck upon an adsorption mat etc. When using a medicine, you must be what suited the technical standard established law.
Notification procedures	1) In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. 2) Remove the neighboring source of ignition.

7. HANDLING AND STORAGE

Handling	
Technical note	1) Avoid contact with a flame, sparks, or a high temperature object, and do not emit stream. 2) Implement the measure against static electricity and use conductive Working clothes, shoes, etc. 3) When fixing or processing the machine etc. in which oil remains, it carries out, after removing oil completely at a safe place. 4) Use a pump etc., when you take out from a container. Don't suck up by the mouth using a small tube. Does not drink. 5) Wear the protective equipment, when the skin may be touched or it may go into an eye. 6) When mist occurs, don't inhale mist using a respiratory-organs implement etc. 7) Be sure to seal a container.
Safe handling notes	1) The vapor which occurred from petroleum products is heavier than air, it stagnates easily. Therefore, ventilation, fire, etc. need to be warned. 2) It shall be dealt with at normal temperature, be careful of water or mixture of an impurity.

	3) Do not contact halogen, strong acid, alkali, and an oxidizing substance.
Hygiene measure	Wet clothes are removed, and after using purification completely, they are re-used.
Storage	
Relevant storage conditions	1) Avoid direct rays and keep in a well-ventilated place. 2) Stopper closely and keep it to mix garbage, water after used. 3) Display a dangerous object and keep it. 4) Avoid heat, a spark, a flame, and static electricity accumulation. 5) Make into explosion-proof construction the electrical appliances used in a storage place and instruments should ground. 6) The contact with halogen, strong acid, alkali, and an oxidizing substance and storage in the same place are avoided.
A safe container packaging	1) Do not put pressure on an empty container. It may explode, when pressure is put. 2) The container should not carry out welding, heating, puncturing, or cutting. A residue may ignite with explosion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	
Exposure limit	ACGIH TLV/TWA 5mg/m ³ mist
Appropriate engineering controls	1) Perform sealing of a source, when mist occurs. Provide adequate general and local exhaust ventilation. 2) Near the handling place, the equipment for washing of an eye and body washing is installed.
Protective equipment	
Respiratory	Use organic vapor cartridge respirators as needed.
Hand protection	Impervious industrial quality gloves are required for prolonged and/or repeated exposures.
Eye protection	Chemical splash goggles are recommended to prevent eye exposure to liquid or mist.
Skin and body protection	Wear an oil proof long-sleeves fatigue uniform, when you deal with it over a long period of time, or in getting wet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Light yellow
Odor	Odorless
Melting point / Freezing point	No data
Boiling point or initial boiling point and boiling range	Boilong point : No data
Flammability	Upper:7%, Lower:1%(Estimated value)
Lower and upper explosion limit / flammability limit	
Flash point	226°C (COC)
Auto-ignition temperature	No data
Decomposition temperature	No data
pH	No data
Kinematic viscosity	46.2mm ² /s (40°C)
Solubility - Solubility in water	Insoluble
Partition coefficient n-octanol/water(log value)	No data
Vapour pressure	0.5Pa (25°C)
Density and / or relative density	0.870g/cm ³ (15°C)
Relative vapour density	No data
Particle characteristics	No data
Other data	
Pour point	-12.5°C

10. STABILITY AND REACTIVITY

Reactivity	Stable when stored in the dark at room temperature.
Chemical stability	Stable at room temperature and pressure.
Possibility of hazardous reactions	Avoid contact with a strong oxidizing agents.
Conditions to avoid	Heat, flames and sparks. Exposure to sunlight. Exposure to moisture.
Incompatible materials	Halogens, strong acids, alkalis, oxidizing agents.
Hazardous decomposition products	Carbon monoxide etc. may occur in the case of combustion.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	1) Oral Rat LD ₅₀ > 5000mg/kg 2) Dermal Rat LD ₅₀ > 5000mg/kg 3) Inhalation (vapor) Not available 4) Inhalation (mist) Rat(4h) LC ₅₀ > 5mg/L
Skin corrosion / irritation	No information classified into dermal irritation. The result classified into dermal irritation is not obtained in two or more skin irritancy examinations depended on a rabbit. However, keep in mind that it may cause the dermatitis by skin degreasing when it contacts long period of time or repeatedly.
Serious damage / eye irritation	No information classified into eye irritancy. The result classified into eye irritancy is not obtained in two or more ophthalmological eye irritation tests depended on a rabbit.
Respiratory or skin sensitization	It is the result of having no skin sensitization by a Buehler test (guinea pig).
Germ cell mutagenicity	Although the wide range mutagenicity test (in vivo and in vitro) is carried out, the result which shows mutagenicity is not obtained from most results. Therefore, it is judged that it has no productive cell mutagenicity.
Carcinogenicity	It is judged by the knowledge acquired from the skin exposure examination to various animals that carcinogenicity is nothing. Advanced refined oil is classified into the group 3 (it cannot classify about carcinogenicity to humans) according to IARC, and the almost same classification is made also by ACGIH. The classification as a carcinogen does not need to be applied in evaluation by EU.
Reproductive toxicity	By the knowledge acquired from the growth toxicity and the reproductive toxicity examination by a rat, the result which shows this toxicity is not obtained, it is judged that he has no reproductive toxicity.
Specific target organ toxicity -single exposure	The single time exposure toxicity to the various particular organs by acute study is not accepted.
Specific target organ toxicity -repeated exposure	Although the repetitive toxicity test for four weeks by skin and inhalation administration to two years was done, influence on the whole body was not checked.
Aspiration hazard	Kinematic viscosity (40°C) does not correspond to hydrocarbon of 20.5mm ² or less, it cannot classify.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Since it hardly dissolves in water, aquatic organism is stained.
Acute toxicity(Fish)	Fishes (Pimephales promelas 96hours) LL ₅₀ > 100mg/L
No-effect level(Fish)	Fishes (Pimephales promelas 14days) NOEL > 100mg/L
The inhibition of the mobility(Crustacean)	Crustacean (Daphnia magna 48hours) EL ₅₀ /NOEL > 10,000mg/L

No-effect level(Crustacean)	Crustacean (Daphnia magna 21days)	NOEL > 10mg/L
No-effect level(Algae)	Algae (Selenastrum)	NOEL > 100mg/L
Anti-Microbe luminescence	Anti- luminescence was not checked by Luminescence test (4days) of microbe (This product is using as a sample WAF (water adaptability fraction) made in the above-mentioned examination for difficulty water solubility.)	
Hazardous to the aquatic environment - Short-term (acute) hazard	It is judged from the above-mentioned test result that it has no acute aquatic toxicity.	
Hazardous to the aquatic environment - Long-term (chronic) hazard	It is judged from the above-mentioned test result that it has no chronic aquatic toxicity.	
Persistence and degradability	Result of biodegradability test is 31% (for 28 days), although it has essentially biodegradability, it is judged not to decompose easily.	
Bioaccumulative potential	Not available	
Mobility in soil	Generally, it floats to water. It is guessed that Log KOC of similar base oil is three or more, the oil leaked on the surface of the earth cannot consider flowing into groundwater easily by adsorbing soil.	
Hazardous to the ozone layer	The ingredient listed in the Annexes to the Montreal Protocol is not included.	
Other	The information above-mentioned is based on partial information and similar substance. Perfect information is not necessarily acquired to advanced refining base oil.	

13. DISPOSAL CONSIDERATIONS

Waste disposal	<ol style="list-style-type: none"> 1) An entrepreneur needs to process industrial waste himself. Or when the industrial waste treatment company or the municipal corporation is performing the processing, it commissions and processes there. 2) Don't abandoned. 3) When using for land reclamation, it burns using an incineration system. You have to check that the burning matter is below the standard provided in the "Wastes Disposal and Public Cleaning Law enforcement ordinance." 4) When burning, carrying out safe place and by how to twist a possibility of doing harm or damage to others, a watchman is followed.
Container disposal	Make a container purification and recycle it, or required to follow related the disposal act and the regulation issued by local authorities. When you discard an empty container, remove a content completely.

14. TRANSPORT INFORMATION

International regulations	
UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class	Not applicable
Packing group	Not applicable
Environmental hazards	Not applicable
Sea transport (IMDG)	Not subject to IMDG code.
Air transport (IATA)	Not subject to IATA regulations.
Local regulations	Any relevant local regulations concerning transport should be observed.

15. REGULATORY INFORMATION

Follow all regulations in your country.

Complies with the following national/regional chemical inventory requirements: ENCS, TSCA

16. OTHER INFORMATION

Prepared by: MATSUMURA OIL CO., LTD.

This information is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.