

[Material Safety Data Sheet]

Target of this document :All user and work manager of this product including manufacturing worker, dealer and transportation etc..

1. Chemical Product and Company Identification

Product/Chemical Name VBC 2XLUBE HDD Premium Engine oil CI-4/SL 20W50

General Characteristics Liquid (mixture)

Identification of Hazard Irritable, Hazardous on environment

General Use Engine oil

Manufacturer Vina Buhmwoo Co.,Ltd

No 7C, Nhon Trach 2 IZ, Nhon Trach District, Dong Nai Province, VietNam.

Tel: 0251 356 9521-3 Fax: 02511 356 9520

Supplier/Dealer Vina Buhmwoo Co.,Ltd

No 7C, Nhon Trach 2 IZ, Nhon Trach District, Dong Nai Province, VietNam.

Tel: 0251 356 9521-3 Fax: 02511 356 9520

Issue date 2017-07-15

Revision no, Date No: 3 Date: 2020-08-15

2. Hazard Identification

a) Hazard.Risk Classification:

Acute Toxixity-Inhalation : Category 4
Skin corrosion/irritation : Category 2
Eye Damage/irritation : Category 2A

b) Label elements including precautionary statements

o Symbol:

Signal Word : Warning

Hazard.Risk
 H315: Causes skin irritation

H332: Causes serious eve irritation

H332: Harmful if inhaled

o Precautionary Statement :

Prevention
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/faceprotection.

Response
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a

positioncomfortable for breathing.

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P321: Specific treatment(see ... on this label).

P332+P313: If skin irrtation occurs: Get medical advice/attention.



P337+P313: If eye irrtation persists: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

StorageDisposalSee the Section 7See the Section 13

c) Other Hazard. Risk which are not included in the classification criteria

o NFPA Code: Health: 1, Flammability: 1, Reactivity: 0

3. Composition/Information on Ingredients

Chemical Name	CAS No	Contents(%)
Distillates, hydrotreated heavy paraffinic	64742-54-7	80 ~ 90
Ethylene-propylene copolymer	9010-79-1	5 ~ 15
Trade Secret	Not determined	1 ~ 10

4. First Aid Measures

Eye Contact

Thoroughly flush the eyes with large amounts of clean low-pressure water for atleast 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Skin Contact

Remove contaminated clothing and wash skin with plenty of soap and water. Flush with plenty of water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

Inhalation

If overcome by exposure, remove person to fresh air immediately. Give oxygen orartificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Ingestion

Do not induce vomiting. Obtain emergency medical attention. Prompt action is essential.

Indication of immediate medicalattention and notes for physician:

May cause slight eye and skin irritation. Not expected to be a sensitizer. Treatsymptomatically.

Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-Fighting Measures

a) Suitable

SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam.

LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

b) Specific hazards arising from the chemical:

Thermal decomposition may produce carbon monoxide and other toxic vapors.

c) Special protective equipment and precautions for fire-fighters :

Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear. Heat from fire enerate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flah point. Fight fire form a safe distance/protected location.

Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water. Although water souble, may not be practical to extinguish fire by water dilution. Notify authorities



immediately if liquid enters sewer/public waters.

6. Accidental Release Measures

a) Personal precautions, protective equipment and emergency procedures:

Wear chemical resistant gloves such as: Butyl rubber.

Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn.

The equipment must be cleaned thoroughly affer each use.

b) Environmental precautions and protective procedures :

May contaminate water supplies/pollute public waters. Evacuate/Limit access.

Equip responders with proper protection.

Prevent flow to sewer/public waters. Stop release. Notify fire and environmental authorities. Restrict water use for cleanup.

c) Methods and materials for containment and cleaning up:

Eliminate all ignition sources (no smoking, flares, sparks of flames in immediate area). Stop leak if you do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor but may not prevent ignition in closed spaces. Recover by pumping or with suitable absorbent.

7. Handling & Storage

a) Precautions for safe handling:

Avoid contact with skin. Use proper bonding and/or grounding procedures.

Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source).

b) Conditions for safe storage (including any incompatibilities):

Keep container cloed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be grounded and bonded. Drums must be grounded and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters.

8. Exposure Controls/Personal Protection

a) Control parameters (e.g. occupational exposure limit values, biological limit values):

<Mineral oil mist>

OSHA TWA: 5mg/m3

- ACGIH TWA: 5mg/m3, STEL: 10mg/m3

- NIOSH TWA(10hr): 5mg/m3, STEL: 10mg/m3

b) Appropriate engineering controls:

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

c) Personal protective equipment:

Respiratory

If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate



to protect worker health, an approved respirator may be appropriate. Respirator selection, use and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator.

• Eye protection :

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

Hands protection :

Wear chemical resistant gloves such as: Butyl rubber.

o Body protection:

Any specific clothing information provided is based on published literature or manufacturer data.

The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant colthing is recommended.

9. Physical & Chemical Properties

Appearance:

Odor:

Odour threshold:

PH:

Meting point/freezing point:

Initial boiling point and boiling range:

Yellowish Brown

Mild petroleum odour

No data available

Not available.

Not available.

Flash point: 270 °C

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive limits

No data available.

No data available.

Vapor pressure: Less than 0.1kPa at 20°C Solubility: Water solubility: Negligible Vapor density: More than 5 (Air = 1) Specific gravity (15°C): 0.885 (Typical) Partition coefficient: n-octanol/water: No data available. Auto-ignition temperature: No data available. Decomposition temperature: No data available. Viscosity (mm/s, 100°C): 20.11 (Typical) Molecular mass: No data available.

10. Stability & Reactivity

a) Chemical stability and possibility of hazardous reactions:

Material is stable under normal conditions

- b) Conditions to avoid Not expected to occur.
- c) Incompatible Heat, sparks, open flame, other ignition sources, and oxidizing conditions.
- d) Hazardous decomposition products:

Strong oxidizers such as hydrogen peroxide, nitricacid, sulphuric acid, etc

e) Hazardous decomposition products: Carbon oxides (CO, CO2)

11. Toxicological Information

a) Information on the likely routes of

InhalationIngestionMay cause slight irritation.May cause diarrhea.



• Eve exposure : May cause slight eye irritation. Skin exposure May cause slight skin irritation.

b) Health hazards information

Acute toxicity:

<Highly refined mineral oil>-IUCLID

o Oral · LD50(rat) > 5000mg/kgLD50(rabbit): > 5000mg/kg o Skin · o Inhalation: LC50(rat): 2.18mg/L/4h

o Skin May cause slight skin irritation. May cause slight skin irritation. Serious eye damage/irritation : Respiratory sensitization : Not expected to be a sensitizer. O Skin sensitization : Not expected to be a sensitizer.

o Carcinogenicity: Not applicable o Germ cell mutagenicity: Not applicable Reproductive toxicity : Not applicable

o Specific target organ systemic toxicity-single Not applicable Specific target organ systemic toxicity-repeated Not applicable Aspiration hazard : No data available. c) Numerical measures of toxicity: No data available.

12. Ecological Information

a) Aquatic and

<Highly refined mineral oil>

o Chronic Toxicity data (fish), NOEC: >5000mg/L (7day)-IUCID Data Chronic Toxicity data (Aquatic Invertebrates). 552mg/L (7day)-IUCID Data b) Persistence and degradability: Expected to be biodegradable.

c) Bioaccumulative potential:

Expected to have mobility in soils. d) Mobility in soil:

e) Other adverse effects: No data available.

13. Disposal Consideration

a) Disposal method: Use only licensed transporters and permitted facilities for waste disposal.

b) Disposal precaution

RCRA Information: The unused product, in our opinion, is not specifically listedby the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated tocontain materials which are listed as hazardous wastes. It does not exhibit thehazardous characteristics of ignitability, corrositivity or reactivity and is notformulated with contaminants as determined by the Toxicity CharacteristicLiaching Procedure (TCLP). However, used product may be regulated.

Not applicable

14. Transport Information

5/6

a) UN number: Not applicable b) UN proper shipping Not applicable c) Transport hazard class: Not applicable d) Packing group (if applicable): Not applicable e) Marine pollution (yes/no): Not applicable

f) Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: Not applicable



15. Regulatory Information

- a) Safety, health and environmental regulations specific for the product in question:
- EINECS (European Inventory of Existing Commercial Chemical Substances), June 15, 1991
- TSCA (US, Toxic Substances Control Act), December, 2006
- AICS (Australian Inventory of Chemical Substances), June, 1996
- DSL (Canadian Domestic Substances List), January 26, 1991
- IECSC (Chinese Chemical Inventory)
- ENCS (Japanese Existing and New Chemical Substances)
- ECL (Korean Existing Chemical Number), January, 1997
- PICCS (Philippine Inventory of chemicals and Chemical Substances), 2000
- NZIoC (New Zealand Inventory of Chemicals), 2006
- SWISS (Swiss Giftliste 1 and Inventory of Notified New Substances)
- ASIA-PAC
- <EU Classification and Labelling information>
- o Classification: Carc. Cat. 2: R45
- Symbol(s) and Indication(s) of Danger : T Toxic
- Risk Phrases
- R45: May cause cancer.
- Safety Phrases
- S53: Avoid exposure obtain special instructions before use.
- -S45: In case of accident or if you feel unwell, seek medical advice immediately

16. Other Information

a) Information source and references:

- 1) Globally Harmonized System of classification and labeling of chemicals(GHS), First revised
- 2) United States National Library of Medicine.
- 3) EINECS (European Inventory of Exisitin Commercial chemical Substances)
- 4) IARC(International Agency for Research on Cancer.)
- 5) NIOSH (The National Institute for Occupational Safety and Health)
- 6) ACGIH (American Conference of Governmental Industrial Hygienists.)
- 7) IUCLID Data
- 8) ICSC (International Chemical Safety Cards) ILO
- 9) Transport of Dangerous Goods UN
- 10) Korea Occupatonal Safety & Health Agency
- 11) U.S Department of Health and Human Services.
- 12) MSDS of raw material from supplier

The product is intended only for commercial/industrial processing or application. This information is based on the information from and the raw material company, and is intended to describe the product for the pruposes of health, safety and environmental requirements only. Therefore, it should not be construed as gauranteeing any specific property of the product. To the best of our knowledge, the information contained herein is correct and accurate. However, Vina Buhmwoo Company Ltd does not assume any liability whatsoever for the correctness or accuracy of information contained herein. The precautionery items were based on ordinary handling, in case of special handling, safety measures in compliance with the application and usage shall be executed. Final determination of safety and suitability of any material is the sole responsibility of the keeper end user. All materials may present unknown hazards are described herein but they may not be the only hazards in relation to the products. For more information, contact our Internet Home Page (www.vinabuhmwoo.com) or send email to us.

