

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** **Hilti Two-stroke oil DSH**
- **Container size** 1 L / 1.057 qt / 33.8 fl.oz.
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Oil for air-cooled two-stroke engines.

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hilti Taiwan Co., Ltd.
4/F, No. 2 Jen Ai Road, Sec. 2,
Taipei, 10060
Tel +886 2 2357 9090
Fax +886 2 2397 3730
Customer Service:
Tel 0800 221 036 Toll Free
Fax +886 2 2397 3683
Fax +886 2 2516 7807
- **Informing department:**
anchor.hse@hilti.com
see section 16
- **Emergency telephone number:**
Hilti Taiwan Co., Ltd.
Tel +886 2 2357 9090
Fax +886 2 2397 3730

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous to health or environment according to the CLP regulation.



- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 Do not breathe mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**

Mixture of the substances listed below with harmless additions.

· **Dangerous components:**

64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha; benzene <0,1 %	10-20%
	 Xn R65  Asp. Tox. 1, H304	

- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **After inhalation**
Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor after significant exposure.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly. If skin irritation persist, call a physician.
- **After eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- **After swallowing** Do not induce vomiting; immediately call for medical help.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
Foam
CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents** High volume water jet
- **Special hazards arising from the substance or mixture**
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Sulphur dioxide (SO₂)
- **Advice for firefighters**
- **Protective equipment:** In the event of fire, wear self contained breathing apparatus

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked/spilled product.
Product forms slippery surface when combined with water.
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
- **Environmental precautions:**
Prevent from spreading (e.g. by damming-in or oil barriers).
Do not allow to enter drainage system, surface or ground water.
Do not allow to enter the ground/soil.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Keep containers tightly sealed.
Provide sufficient air exchange and/or exhaust in work rooms. When using, do not eat, drink or smoke. Ingestion, exposure to skin and eyes and inhalation of any general vapours should be avoided.
Keep away from heat and direct sunlight.
Do not inhale the vapours released during application.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Prevent any penetration into the ground.
Use only containers specifically permitted for this substance/product.
Keep packaging securely closed and dry, store at +5 °C to +30 °C.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from flammable substances.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Storage class**
As per VCI (1991) storage classification concept.
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- **Specific end use(s)** Oil for air-cooled two-stroke engines.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha; benzene <0,1 %	
TLV (China)	Short-term value: 525 mg/m ³
TLV (Taiwan)	Short-term value: 525 mg/m ³

· **Additional information:** The lists that were valid during the compilation were used as basis.

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- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Take off immediately all contaminated clothing
Do not inhale gases / fumes / aerosols.
Do not carry cleaning cloths impregnated with the product in trouser pockets.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
- **Breathing equipment:**
Not necessary if room is well-ventilated.
Use breathing protection only when aerosol or mist is formed.
- **Protection of hands:** Oil resistant gloves
- **Material of gloves:** Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	Red
Odour:	Characteristic
Odour threshold:	Not determined
- **pH-value:** Not applicable
- **Change in condition**

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
- **Flash point:** 67°C (DIN 2592)
- **Inflammability (solid, gaseous)** Not determined
- **Ignition temperature:** Not determined
- **Decomposition temperature:** Not determined
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Critical values for explosion:**

Lower:	Not determined
Upper:	Not determined
- **Vapour pressure:** Not determined
- **Density at 20°C** 0,867 g/cm³ (ASTM 4052)
- **Relative density** Not determined
- **Vapour density** Not determined
- **Evaporation rate** Not determined
- **Solubility in / Miscibility with**

Water:	Unsoluble
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- **Segregation coefficient (n-octanol/water):** Not determined
- **Viscosity:**

dynamic:	Not determined
kinematic at 40°C:	50 mm ² /s (DIN 51562-1)
- **Solvent content:**

Organic solvents:	10-20 %
Water:	0 %
- **Solids content:** 0 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised
- **Conditions to avoid** No further relevant information available.

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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** none, if stored and handled correctly.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

LD/LC50 values that are relevant for classification:

64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy

Oral	LD50	> 2000 mg/kg (rango)
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- **Primary irritant effect:**
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Delivery of waste oil only to officially authorized collectors.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
When storing used mineral oil products, ensure that the categories for waste oil and mixing instructions are observed.
Hand over to disposers of hazardous waste.

European waste catalogue

13 00 00	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
13 02 00	waste engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

14 Transport information

· UN-Number	-
· UN proper shipping name	-
· Transport hazard class(es)	-
· Packing group	-
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· ADR	
· Remarks:	Not classified as dangerous goods in terms of the ADR
· IMDG	
· Remarks:	Not dangerous according to the above specifications.

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Safety data sheet

according to 1907/2006/EC, Article 31

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· HS-Code:	2710 19 99: Other lubricating oils and other oils
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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Precautionary statements
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P260 Do not breathe mist/vapours/spray.
 - P262 Do not get in eyes, on skin, or on clothing.
 - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - P331 Do NOT induce vomiting.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Chemical safety assessment: not required.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
 - H304 May be fatal if swallowed and enters airways.
 - R65 Harmful: may cause lung damage if swallowed.
- Department issuing data specification sheet:
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 - Hiltistrasse 6
 - D-86916 Kaufering
 - Tel.: +49 8191 906092
 - Fax: +49 8191 906826
 - e-mail: anchor.hse@hilti.com
- Contact: Mechthild Krauter
- Abbreviations and acronyms:
 - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
- * Data compared to the previous version altered.

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