



# Safety Data Sheet According to 1907/2006/EC, Article 31

Printing Date 25.03.2022 - Revision 25.03.2022

## 1. Identification of Product and Company's Name:

### PRODUCT DETAIL

**Trade Name:** OWS 520 Battery Terminal Protector

**Article Number:** 520

**Application of the substance / the preparation:**

**Manufacturer / Supplier:**

Our Workshop System (S) Pte Ltd  
107 Tuas View Walk 1, Singapore 637730  
Tel: +65 6452 3209  
Fax: +65 6452 0586  
[www.ows-asia.com](http://www.ows-asia.com)

**Further information obtainable from:**

Labor: Gordon Chiew  
Tel: (65) 9818 3860  
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**Information in case emergency:** Tel: (49) 171 9978 792 Monday to Friday 9:00 to 18:00 CET

## 2. Possible Hazards:

### Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant  
R38: Irritating to skin.



F+; Extremely flammable  
R12: Extremely flammable.



N; Dangerous for the environment  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R67: Vapours may cause drowsiness and dizziness.

### Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.  
Has a narcotizing effect.

### Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### Label elements

#### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

### Code letter and hazard designation of product:



Xi Irritant  
F+ Extremely flammable  
N Dangerous for the environment

**Risk phrases:**

12 Extremely flammable.  
38 Irritating to skin.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
67 Vapors may cause drowsiness and dizziness.

**Safety phrases:**

23 Do not breathe aerosol.  
24/25 Avoid contact with skin and eyes.  
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
46 If swallowed, seek medical advice immediately and show this container or label.  
51 Use only in well-ventilated areas.

**Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking!  
92.3 % by mass of the contents are flammable  
Keep out of the reach of children

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.  
**vPvB:** Not applicable.

### 3. Composition/Ingredients:

**Chemical characterization:** Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.





**Dangerous components:**




CAS: 106-97-8      butane       F+ R12      45%


EINECS: 203-448-7       Flam. Gas 1, H220;       Press. Gas, H280

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CAS: 64742-49-0      Naphtha (petroleum), hydrotreated light      40%

EINECS: 265-151-9       Xn R65;       Xi R38;       F R11;       N R51/53 R67

 Flam. Liq. 1, H224;       Asp. Tox. 1, H304;       Aquatic Chronic 2,H411;

 Skin Irrit. 2, H315; STOT SE 3, H336



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CAS: 74-98-6      propane       F+ R12      5%

EINECS: 200-827-9       Flam. Gas 1, H220;       Press. Gas, H280



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CAS: 64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy 4%

EINECS: 265-185-4  Xn R65;  N R51/53 R10-66-67





 Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  
 STOT SE 3, H336

CAS: 75-28-5 isobutane  F+ R12 2%

EINECS: 200-857-2  Flam. Gas 1, H220;  Press. Gas, H280


CAS: 110-54-3 n-hexane 2%

EINECS: 203-777-6  Xn R48/20-62-65;  Xi R38;  F R11;  N R51/53 R67

 Flam. Liq. 2, H225;  Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304;  
 Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; STOT SE 3, H336

CAS: 64742-88-7 Solvent naphtha (petroleum), medium aliph. 2%

EINECS: 265-191-7  Xn R65 R10

 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

#### General information:

Take affected persons out into the fresh air.  
Do not leave affected persons unattended.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** Do not induce vomiting; call for medical help immediately.

## 5. Fire Fighting measures:

### Extinguishing media

#### Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** Water with full jet

**Special hazards arising from the substance or mixture** Risk of bursting in case of fire heat

## Advice for firefighters

### Protective equipment:

Do not inhale explosion gases or combustion gases.

### Additional information

Cool endangered receptacles with water spray.

## 6. Accidental release measures:

### Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

### Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Let volatiles evaporate - stem up residues mechanically

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. Storage and Handling:

### · Handling:

#### · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

#### · Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights.

Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

#### · Conditions for safe storage, including any incompatibilities

#### · Storage:

#### · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packaging with pressurized containers.

#### · Information about storage in one common storage facility: Not required.

#### · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

#### · Recommended storage temperature:

15 - 35°C, max. 50°C

## 8. Explosion Control/Personal Protection:

### · Additional information about design of technical facilities: No further data; see item 7.

### · Control parameters

### · Ingredients with limit values that require monitoring at the workplace:

#### 106-97-8 butane

WEL

Short-term value: 1810 mg/m<sup>3</sup>, 750 ppm

Long-term value: 1450 mg/m<sup>3</sup>, 600 ppm

Carc (if more than 0.1% of buta-1.3-diene)

#### 64742-49-0 Naphtha (petroleum), hydrotreated light

TWA (8H)

Long-term value: 1000 mg/m<sup>3</sup>, 250 ppm

#### 110-54-3 n-hexane

WEL

Long-term value: 72 mg/m<sup>3</sup>, 20 ppm

### · Additional information: The lists valid during the making were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing
  - Wash hands before breaks and at the end of work.
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the eyes and skin.
- **Respiratory protection:**
  - Not necessary if room is well-ventilated.
  - Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
- **Material of gloves** If contamination is possible, use gloves made of nitrile according EN 374
- **Penetration time of glove material** > 480 min / 0,4 mm thickness
- **Eye protection:** Safety glasses in case of spittings

## 9. Physical & Chemical Characteristics:

### · Information on basic physical and chemical properties

#### General Information

Appearance: Form: Aerosol                      Colour: Blue                      Odour: Petroleum-like

#### · Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: -44°C

· Flash point: Not applicable, as aerosol.

· Ignition temperature: 250°C

· Self-igniting: Product is not self igniting.

· Danger of explosion: Risk of bursting at temperatures > 50°C. Damage of the container may lead to the formation of explosive mixtures of gas/vapors with air.

#### · Explosion limits:

Lower: 0.8 Vol %

Upper: 10.9 Vol %

Pressure (20°C) 2.5 – 4.5 bar

· Density at 20°C: 0.64 g/cm<sup>3</sup>

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

#### · Solvent content:

Organic solvents: 38.1 %

Solids content:

ca. 11.7 %

· Other information

Additional information

Vapors are heavier than air.

## 10. Stability & Reactivity Data:

### · Reactivity

#### · Chemical stability

· Thermal decomposition / conditions to be avoided:

Risk of bursting at temperatures >50°C.

· Possibility of hazardous reactions:

No dangerous reactions known.

· Hazardous decomposition products:

No dangerous decomposition products known.

· Additional information:

Stable for a storage time of min. 24 months

## 11. Toxicological Information:

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**

### 64742-49-0 Naphtha (petroleum), hydro treated light

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 20 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

## 12. Ecological Information:

- **Toxicity**
- **Aquatic toxicity:**
- **64742-49-0 Naphtha (petroleum), hydro treated light**
- **LC 50 / 96 h** 2.5 mg / l (Flathead Minnow /Elritze)

- **Ecological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 13. Disposal Instructions:

- **Waste treatment methods**
- **Recommendation**  
empty cans: material recycling  
filled cans: remove in accordance with local regulations
- **European waste catalogue**  
16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST  
16 05 00 gases in pressure containers and discarded chemicals  
16 05 04 gases in pressure containers (including halons) containing dangerous substances
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14. Transportation Instructions:

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label:** 2.1
- **Special marking:** Symbol (fish and tree)
- **UN proper shipping name:** 1950 AEROSOLS
- **Limited quantities (LQ):** LQ2
- **Transport category:** 2
- **Tunnel restriction code:** D
- **Remarks:** Transportation as "LIMITED QUANTITIES" (LQ2) according 3.4 ADR possible.  
Sole marking: Sign for "Limited Quantities" (rhombus with two black edges)  
Entry in the transportation document: Transportation according chapter 3.4 ADR

· **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

- **Special precautions for user Warning:** Gases

## 15. Regulation Instructions:

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xi Irritant  
F+ Extremely flammable  
N Dangerous for the environment

· **Risk phrases:**

- 12 Extremely flammable.
- 38 I irritating to skin.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 67 Vapors may cause drowsiness and dizziness.

· **Safety phrases:**

- 23 Do not breathe aerosol.
- 24/25 Avoid contact with skin and eyes.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition – No smoking!

92.3 % by mass of the contents are flammable

Keep out of the reach of children

· **National regulations:**

· Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

**Class Share in %**

I ≤2,5

NK 25-50

· **Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

## 16. Other Information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

R10 Flammable.

R11 Highly flammable.

R12 Extremely flammable.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62 Possible risk of impaired fertility.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

· \* Data compared to the previous version altered.