

SURVOS Plus L

Version 3.0 | Print Date: 23.11.2011 | Revision Date: 23.11.2011



SURVOS
PLUS L

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

1.1. Product identifier

Trade name: SURVOS Plus L

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

Use of the Substance/Mixture: At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Recommended restrictions on use: At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

1.3. Details of the supplier of the safety data sheet

Company: HPM Technologie GmbH
Rudolf-Diesel-Str. 3
DE 72525 Münsingen
Telephone: +49 (0)7381-9344-0
Telefax : +49 (0)7381-9344-88
Email-address : info@hpmtechnologie.de

Responsible/ issuing person: Umwelt- / Qualitätsmanagement

1.4. Emergency telephone number

Emergency telephone number: +49 (0)208-7828-0 Available 24h/7d

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

| REGULATION (EC) No 1272/2008 | | | |
|------------------------------|-----------------|---------------|-------------------|
| Hazard class | Hazard category | Target Organs | Hazard statements |
| Aspiration hazard | Category 1 | --- | H304 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

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**SURVOS**
PLUS L**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

| Directive 67/548/EEC or 1999/45/EC | |
|------------------------------------|--------------|
| Hazard symbol / Category of danger | Risk phrases |
| Harmful (Xn) | R65 |
| | R66 |

For the full text of the R-phrases mentioned in this Section, see Section 16.

Potential environmental effects:

See section 12 for environmental information.
No further information available.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols:



Signal word: Danger

Hazard statements: H304 May be fatal if swallowed and enters airways.

Precautionary statements

Response: P301 + P310 If swallowed: Immediately call a POISON CENTER or doctor/ physician.
P331 Do not induce vomiting.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling:

EUH066 Repeated exposure may cause skin dryness or cracking.

Hazardous components which must be listed on the label:

- Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
- Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

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**SURVOS**
PLUS L**3. Composition/information on ingredients****3.1. Mixtures**

Chemical nature: Hydrocarbon mixture

| Hazardous Components | Amount [%] | Classification (REGULATION (EC) No 1272/2008) | | |
|---|------------|--|-------------------|--------------------------------|
| | | Hazard class / Hazard Category | Hazard Statements | Classification (67/548/EWG) |
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics | | | | |
| EC-Nr. : 918-481-9 | ≥ 50 | Asp. Tox.1 | H304 | Xn; R65 |
| Registration : 01-2119457273-39-xxxx | | | | |
| Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics | | | | |
| EC-Nr. : 918-317-6 | ≥ 50 | Asp. Tox.1 | H304 | Xn; R65 |
| Registration : 01-2119474196-32-xxxx | | | | |

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures**4.1. Description of first aid measures**

| | |
|--------------------------|--|
| General advice: | Move out of dangerous area. Take off all contaminated clothing immediately. |
| If inhaled: | Remove to fresh air. If symptoms persist, call a physician. If unconscious place in recovery position and seek medical advice. |
| In case of skin contact: | Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. |
| In case of eye contact: | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| If swallowed: | Do not induce vomiting. Risk of aspiration! Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position. |

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

| | |
|-----------|--|
| Symptoms: | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Inhalation can cause CNS-depression and narcosis. Dries out the skin. |
| Effects: | Risk of serious damage to the lungs (by aspiration). Aspiration may cause pulmonary oedema and pneumonitis. |

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

Treatment: Treat symptomatically.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing Water spray, foam, dry powder or CO₂.

Unsuitable extinguishing High volume water jet.
media:

5.2. Special hazards arising from the substance or mixture

Specific hazards during Combustible liquid. Vapours may form explosive mixtures with
der Brandbekämpfung: air. The product is insoluble and floats on water. Incomplete
combustion may form toxic pyrolysis products. Fire may cause
evolution of: Carbon oxides.

5.3. Advice for firefighters

Special protective In the event of fire, wear self-contained breathing
equipment for firefighters: apparatus. Wear appropriate body protection (full protective
suit).

Further information: Cool closed containers exposed to fire with water
spray. Collect contaminated fire extinguishing water
separately. This must not be discharged into drains.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Provide adequate
ventilation. Keep away from heat and sources of ignition. Avoid
contact with skin and eyes. Do not breathe gas/fumes/
vapour/spray.

6.2. Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid
subsoil penetration. If the product contaminates rivers and
lakes or drains inform respective authorities. If material reaches
soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for Ensure adequate ventilation. Absorb with liquid-binding
containment and cleaning up: material (sand, diatomite, acid binders, universal binders). Treat

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recovered material as described in the section „Disposal considerations“.

6.4. Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: Keep container tightly closed. Avoid inhalation of vapour or mist. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures: Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapour/spray. Avoid contact with the skin and the eyes. Keep away from food, drink and animal feeding-stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep in an area equipped with solvent resistant flooring. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on protection against fire and explosion: Combustible liquid; Possible formation of ignitable mixtures in air if heated above flash point and/or if sprayed (atomised). Handle only at temperatures at least 15°C below the flash point. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Further information on storage conditions: Keep away from heat. Keep away from direct sunlight.

Advice on common storage: Incompatible with oxidizing agents.

German storage class: 10 Combustible Liquids

7.2. Specific end uses

Specific use(s): No information available.

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**8. Exposure controls/personal protection****8.1. Control parameters**

| | |
|-------------------|--------------------------|
| Component: | C9-C15 Aliphatics |
|-------------------|--------------------------|

| |
|-------------------|
| Other OELs |
|-------------------|

TRGS 900, AGW:

600 mg/m³, (2(II))

Hydrocarbon mixtures, application as solvent (hydrocarbon solvent), additive-free

8.2. Exposure controls**Engineering measures****Personal protective equipment***Respiratory protection*

Advice:

Required, if exposure limit is exceeded (e.g. OEL). In case of intensive or longer exposure use self-contained breathing apparatus. In case of brief exposure or low pollution use breathing filter apparatus. Recommended Filter type: Combination filter: A-P2

Hand protection

Advice:

Solvent-resistant gloves Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear. The following materials are suitable:

Material:

Nitrile rubber

Break through time:

>=480 min

Glove thickness:

0,45 mm

Eye protection

Advice:

Tightly fitting safety goggles.

Skin and body protection

Advice:

Protective work clothing

Environmental exposure controls

General advice:

Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
If material reaches soil inform authorities responsible for such cases.

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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|------------------------------|---|
| Form: | liquid |
| Colour: | colourless |
| Odour: | hydrocarbon-like |
| Odour Threshold: | no data available |
| pH: | not applicable |
| Melting point/range: | < -20 °C |
| Boiling point/boiling range: | 160 - 260 °C |
| Flash point: | > 61 °C |
| Evaporation rate: | 0,04 (Butyl Acetate = 1) |
| Flammability (solid, gas): | The product is flammable but not readily ignited. |
| Upper explosion limit: | 7 %(V) |
| Lower explosion limit: | 0,5 %(V) |
| Vapour pressure: | ca. 0,6 hPa (25 °C) |
| Relative vapour density: | > 1 (Air = 1.0) |
| Density: | 0,72 - 0,85 g/cm ³ (15 °C) |
| Water solubility: | (20 °C) not respectively poorly mixable |
| Partition coefficient: | no data available |
| Ignition temperature: | > 200 °C |
| Thermal decomposition: | no data available |
| Viscosity, kinematic: | 1,0 - 2,5 mm ² /s (20 °C) |
| Explosivity: | Formation of explosive air/vapour mixtures is possible. |
| Oxidizing properties: | None known. |

9.2. Other information

No further information available.

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10. Stability and reactivity

10.1. Reactivity

Advice: No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice: Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Formation of explosive air/vapour mixtures is possible.

10.4. Conditions to avoid

Conditions to avoid: Heat, flames and sparks.

Thermal decomposition: no data available.

10.5. Incompatible materials

Materials to avoid: Strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products: Fire may cause evolution of: Carbon oxides, Under certain fire conditions, traces of other toxic products cannot be excluded.

11. Toxicological information

11.1. Information on toxicological effects

Irritation

Skin

Result: Prolonged skin contact may defat the skin and produce dermatitis.

Eyes

Result: Causes discomfort in the eyes but does not harm eye-tissue.

Sensitisation

Result: No sensitizing effect known.

Further information

Experience with human exposure: Even smallest amounts of product may cause pulmonary edema or pneumonia when absorbed into the lungs by swallowing or subsequent vomiting.

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Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Acute toxicity

Oral

LD50 > 5000 mg/kg (rat)
Data based on test results or data from a comparable product.

Inhalation

LC50 > 4951 mg/l (rat; vapour)
Data based on test results or data from a comparable product.

Dermal

LD50 > 5000 mg/kg (rabbit)
Data based on test results or data from a comparable product.

Component: Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics

Acute toxicity

Oral

LD50 > 5000 mg/kg (rat) (OECD Test Guideline 401)
Aspiration may cause pulmonary oedema and pneumonitis.

Inhalation

LC50 > 5 mg/l (rat) (OECD Test Guideline 403)
Inhalation may cause central nervous system effects.

Dermal

LD50 > 5000 mg/kg (rat) (OECD Test Guideline 402)

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12. Ecological information

12.1. Toxicity

Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Acute toxicity

Fish

LL0 1000 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (Toxicity to fish)

Toxicity to daphnia and other aquatic invertebrates.

ELO 1000 mg/l (Daphnia magna (Water flea); 48 h) (Toxicity to daphnia)

algae

ELO 1000 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (Toxicity to algae)

Chronic toxicity

Fish

NOELR 0,10 mg/l (Oncorhynchus mykiss (rainbow trout); 28 d)

Aquatic invertebrates

NOELR 0,18 mg/l (Daphnia magna (Water flea); 21 d)

Component: Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics

Acute toxicity

Fish

LL50 > 1000 mg/l (Freshwater fish; 96 h) (Toxicity to fish; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates.

EL50 > 1000 mg/l (Daphnia magna; 48 h) (Toxicity to daphnia; OECD Test Guideline 202)

algae

EL50 > 1000 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (Toxicity to algae; OECD Test Guideline 201)

Chronic toxicity

Fish

NOELR 0,088 mg/l (fish; 28 d)

Aquatic invertebrates

NOELR 0,026 mg/l (Daphnia magna (Water flea); 21 d)

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12.2. Persistence and degradability

Persistence and degradability

Biodegradability

Result: The product is insoluble and floats on water.
The product evaporates slowly.

Biodegradability

Result: 80 % (Exposure Time: 28 d)
Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation

Result: no data available

12.4. Mobility in soil

Mobility

Result: The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Result: This mixture contains no substance considered to be persistent, bio-accumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

Result: Do not flush into surface water or sanitary sewer system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

13.1. Waste treatment methods

Product: Disposal together with normal waste is not allowed. Do not let product enter drains. Can be incinerated, when in compliance with local regulations.

Contaminated packaging: Empty remaining contents. Risk of explosion. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for

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recycling or disposal. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport information

Not dangerous goods for ADR, RID and IMDG.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG: Not applicable.

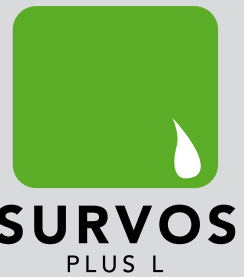
15. Regulatory information

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

WKG (DE): WKG Identification Number: 27; WGK:1; slightly water endangering; WGK (DE); Classification according VwVwS of 17 May 1999, Annex 2

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Major Accident Hazard Legislation: 13 Falls under the German StörfallV.

Other regulations: Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical Safety Assessment

Currently we do not have any Information from our supplier about this.

16. Other information

Full text of R-phrases referred to under sections 2 and 3.

R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.

Further information

Other information: The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.