

SAFETY DATA SHEETS

This SDS packet was issued with item:

071030717

N/A

Kluber Lubrication Munchen KG

Patterson Dental Supply Product Code:
030725,71030717

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: W & H Service Oil
Manufacturer Name: Kluber Lubrication Munchen KG
Address:

GeisenhausenerstraBe 7
D-81379 Munchen

Emergency telephone no.: ++49-89-7876-0
Business Phone: ++49-89-7876-0 telephone exchange
Business Fax: ++49-89-7876-333
For information in North America, call: ++49-89-7876-0 telephone exchange
Manufacturer MSDS Revision Date: 29.8.1997

Safety Data Sheet conformable to EC directive 91/155 EEC

Product Codes:
028073

SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS

Composition/Information:
Chemical characterization: (preparation)
synthetic hydrocarbon oil, ester oil

Additional information: None

SECTION 3 : HAZARDS IDENTIFICATION

No particular hazards known.

SECTION 4 : FIRST AID MEASURES

Eye Contact:
Rinse with plenty of water.
Skin Contact:
Wash off with soap and plenty of water.
Inhalation:

Not applicable
Ingestion:
Do not induce vomiting. Obtain medical attention.
Note to Physicians:
Treat symptomatically. If swallowed or in the event of vomiting,
risk of product entering the lungs.

SECTION 5 : FIRE FIGHTING MEASURES

Fire:
Advice on protection against fire and explosion:
No special precautions required.
Flash Point:
Approx. 200 deg C
Flash Point Method:
DIN ISO 2592
Upper Flammable or Explosive Limit:
Not applicable
Lower Flammable or Explosive Limit:
Not applicable
Auto Ignition Temperature:
Not applicable deg C; Not applicable deg F
Extinguishing Media:
Water spray, foam, dry powder, carbon dioxide (CO2)
Unsuitable Media:
High volume water jet
Fire Fighting Equipment:
Standard procedure for chemical fires.
Additional Information:
Water mist may be used to cool closed containers. In the event of
fire and/or explosion do not breathe fumes.

Special hazards:
In case of fire the following can be released: Carbon monoxide,
hydrocarbons

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Risk of slipping due to leakage/spillage of product.
Spill Cleanup Measures:
Soak up with inert absorbent material (e.g. sand, silica gel, acid
binder, universal binder, sawdust). Dispose of absorbed material in
accordance with the regulations.
Environmental Precautions:
Do not flush into surface water or sanitary sewer system.

Additional information:
None

SECTION 7 : HANDLING and STORAGE

Handling:

Advice on safe handling:
Avoid formation of aerosol.

Storage:

Requirements on storage rooms and vessels:
No special storage conditions required

Incompatible materials:

Incompatible with oxidizing agents.

Further information on storage conditions:

Store at room temperature in the original container.

Advice on protection against fire and explosion:
No special precautions required.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

Hand Protection Description:

No special protective equipment required.

Eye/Face Protection:

No special protective equipment required.

Protective Clothing/Body Protection:

No special protective equipment required.

Respiratory Protection:

No special protective equipment required.

Other Protective:

No special protective equipment required.

Additional advice on system design: not applicable

Ingredients and specific control parameters: None

General protection and hygiene measures:

Clean skin thoroughly after work; apply skin cream.
Do not inhale aerosol.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance:

Liquid

Color:

Colourless

Odor:

Mint-like

Vapor Pressure:

First: Not applicable

Solubility:

Water solubility: Insoluble

Density:

Approx 0.84 g/cm³, 20 deg C

Test Method: DIN 51757
Viscosity:
Kinematic: approx. 15 mm²/s, 40 deg C
Test Method: DIN 51562
Pour Point:
Test method: DIN ISO 3016
Flashpoint:
Approx. 200 deg C
Auto Ignition Temp:
Not applicable deg C; Not applicable deg F
Upper Flammable Explosive Limit:
Not applicable
Lower Flammable Explosive Limit:
Not applicable

Flash point: approx. 200 deg C
Test method: DIN ISO 2592

Ignition temperature: Not applicable deg C; Not applicable F

Explosive properties:
Lower explosion limit: Not applicable
Upper explosion limit: Not applicable

Further information: None

SECTION 10 : STABILITY AND REACTIVITY

Conditions to Avoid:
Do not heat above flash point.
Incompatibilities with Other Materials:
Materials to avoid: strong oxidizing agents
Hazardous Decomposition Products:
None under normal use.

Additional information:
None

SECTION 11 : TOXICOLOGICAL INFORMATION

Applies to All Ingredients:
Ingestion Effects:
LD50/oral/rat = > 2 g/kg (literature data)
Chronic Effects:
None
Other Toxicological Information:
Human experience: Health injuries are not known or expected under normal use.
Toxicological Paragraph:
The toxicological data has been taken from products of similar composition.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

The product has not been tested.

Effect of Material On Aquatic Life:

Aquatic toxicity is unlikely due to low solubility.

Information on elimination (persistence and degradability):
Product is insoluble in water. May be separated out mechanically in purification plants.

Behaviour in environmental compartments:

Ecological injuries are not known or expected under normal use.

Additional information:

Should not be released into the environment.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:

Dispose of in accordance with your local, state and federal regulations as used oil for reconditioning.

Dispose of contaminated packaging and recommended cleaning:
Offer rinsed packaging material to local recycling facilities.

SECTION 14 : TRANSPORT INFORMATION

IATA:

IATA-DGR: not applicable

Maritime Transportation CGVS/GGVE/IMDG: Code: not applicable

Land transport:

GGVS/GGVE: not applicable

Inland waterways transport:

ADN/ADNR: not applicable

Air transport:

ICAO: not applicable

Further information:

Not classified as dangerous in the meaning of transport regulations.

SECTION 15 : REGULATORY INFORMATION

Applies to all ingredients:
European Community Chemical Inventory Status:
Conformable to EC directive 91/155 EEC

Labelling according to EU-guidelines:
The product does not require a hazard warning label in accordance
with EC directives/German regulations on dangerous substances.

All components are accepted by LMBG (Germany) and/or FDA (USA).

SECTION 16 : ADDITIONAL INFORMATION

MSDS Revision Date:
29.8.1997

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid if the material is used in combination with any other materials or if it is processed, unless specified in the text.

Issue-department of safety Data Sheet: Chemical Documentation.
Tel.: +19-89-7876-564

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 - GB



W & H Service Oil F1 MD 200

Version 1.0

Revision Date 09.01.2013

Print Date 11.01.2013

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

1.1 Product identifier

Product name : W & H Service Oil F1 MD 200

Article-No. : 028114

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

Use of the Substance/Mixture : Lubricating oil

1.3 Details of the supplier of the safety data sheet

KLÜBER LUBRICATION MÜNCHEN
Geisenhausenerstrasse 7
D-81379 München
Deutschland
Tel: +49 (0) 897876-0
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Ltd.
Hough Mills, Northowram
Halifax, HX3 7BN
Great Britain
Tel: +44-1422-205115
Fax: +44-1422-206073
sales@uk.klueber.com

1.4 Emergency telephone number

0049 (0) 897876-700 (24hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
ester oil

Hazardous components

| Chemical Name | CAS-No. EC-No. Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|----------------------------|---|--------------------------------|--|----------------------|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 204-881-4 | N; R50/53 | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 | < 0.25 |

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

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : If eye irritation persists, consult a specialist.
Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
- If swallowed : If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
Get medical attention if symptoms occur.

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: Move the victim to fresh air.

: Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : none

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Use personal protective equipment.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth,

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vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not get in eyes or mouth or on skin.
Do not get on skin or clothing.
Do not ingest.
Do not repack.
Do not re-use empty containers.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.
Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
To maintain product quality, do not store in heat or direct sunlight.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

7.3 Specific end uses

8. Exposure controls/personal protection

8.1 Control parameters

| Components | CAS-No. | Value type | Control parameters | Update | Basis |
|----------------------------|--|------------|----------------------|------------|---------|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | TWA | 10 mg/m ³ | 2005-04-06 | GB EH40 |
| Further information: | 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used | | | | |

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8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

none

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection : For prolonged or repeated contact use protective gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Eye protection : Safety glasses with side-shields conforming to EN166

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

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| | |
|--|-----------------------------------|
| Appearance | : liquid |
| Colour | : yellow |
| Odour | : characteristic |
| Odour Threshold | : no data available |
| pH | : no data available |
| Melting point/range | : no data available |
| Boiling point/boiling range | : no data available |
| Flash point | : > 200 °C, Test Method: open cup |
| Evaporation rate | : no data available |
| Flammability (solid, gas) | : no data available |
| Lower explosion limit | : no data available |
| Upper explosion limit | : no data available |
| Vapour pressure | : < 0.001 hPa, 20 °C |
| Relative vapour density | : no data available |
| Density | : 0.84 g/cm ³ , 20 °C |
| Water solubility | : insoluble |
| Solubility in other solvents | : no data available |
| Partition coefficient: n-octanol/water | : no data available |
| Autoignition temperature | : no data available |
| Ignition temperature | : no data available |
| Viscosity, dynamic | : no data available |
| Viscosity, kinematic | : 25 mm ² /s, 40 °C |
| Oxidizing properties | : no data available |

9.2 Other information

| | |
|-------------------|------------------|
| Sublimation point | : not applicable |
| Bulk density | : not applicable |

10. Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

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10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

11. Toxicological information

11.1 Information on toxicological effects

Product

| | |
|-----------------------------------|--|
| Acute oral toxicity | : This information is not available. |
| Acute inhalation toxicity | : This information is not available. |
| Skin corrosion/irritation | : This information is not available. |
| Serious eye damage/eye irritation | : This information is not available. |
| Respiratory or skin sensitization | : This information is not available. |
| Carcinogenicity | : no data available |
| Reproductive toxicity | : no data available |
| Teratogenicity | : no data available |
| STOT - repeated exposure | : This information is not available. |
| Aspiration toxicity | : This information is not available. |
| Further information | : Information given is based on data on the components and the toxicology of similar products. |

Components:

2,6-di-tert-butyl-p-cresol :

| | |
|-----------------------|----------------------------|
| Acute oral toxicity | : LD50: 2,930 mg/kg, rat |
| Acute dermal toxicity | : LD50: > 2,000 mg/kg, rat |

12. Ecological information

12.1 Toxicity

Product:

| | |
|--|---------------------|
| Toxicity to fish | : no data available |
| Toxicity to daphnia and other aquatic invertebrates. | : no data available |
| Toxicity to algae | : no data available |
| Toxicity to bacteria | : no data available |

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Components:

2,6-di-tert-butyl-p-cresol :

Toxicity to fish : LC50: 0.464 mg/l, 96 h, Fish, OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates. : EC50: 0.386 mg/l, 48 h, Daphnia magna (Water flea)

M-Factor : 1

12.2 Persistence and degradability

Product:

Biodegradability :
no data available

Physico-chemical
removability : no data available

Components:

2,6-di-tert-butyl-p-cresol :

Biodegradability : 4.5 %, Result: not rapidly biodegradable, Exposure time: 28 d, OECD 301 C

12.3 Bioaccumulative potential

Product:

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

12.4 Mobility in soil

Product:

Mobility : no data available
Distribution among environmental compartments : no data available

12.5 Results of PBT and vPvB assessment

Product:

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

12.6 Other adverse effects

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

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- Contaminated packaging : Waste codes should be assigned by the user based on the application for which the product was used.
- : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

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

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15. Regulatory information

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

Candidate List of Substances of Very High Concern for Authorisation : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: 2003
Directive 96/82/EC does not apply

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

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

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

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W & H Service Oil F1 MD 500

Version 2.0

Revision Date 20.03.2014

Print Date 21.03.2014

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

1.1 Product identifier

Product name : W & H Service Oil F1 MD 500

Article-No. : 028073

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

Use of the Substance/Mixture : Lubricating oil

1.3 Details of the supplier of the safety data sheet

KLÜBER LUBRICATION MÜNCHEN
Geisenhausenerstrasse 7
D-81379 München
Deutschland
Tel: +49 (0) 897876-0
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Ltd.
Hough Mills, Northowram
Halifax, HX3 7BN
Great Britain
Tel: +44-1422-205115
Fax: +44-1422-206073
sales@uk.klueber.com

1.4 Emergency telephone number

0049 (0) 897876-700 (24hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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Additional Labelling:

EUH210 Safety data sheet available on request.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
ester oil

Hazardous components

| Chemical Name | CAS-No. EC-No. Index-No. Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|------------------------------------|--|--------------------------------|--|----------------------|
| Dec-1-ene, dimers, hydrogenated | 68649-11-6 | Xn; R20 Xn; R65 | Acute Tox. 4; H332 Asp. Tox. 1; H304 | >= 1 - < 10 |

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

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : If eye irritation persists, consult a specialist.
Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
- If swallowed : If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give anything to drink.
Never give anything by mouth to an unconscious person.
Get medical attention if symptoms occur.

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: Move the victim to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : none

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Use personal protective equipment.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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6.4 Reference to other sections

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not get in eyes or mouth or on skin.
Do not get on skin or clothing.
Do not ingest.
Do not repack.
Do not re-use empty containers.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.
Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
To maintain product quality, do not store in heat or direct sunlight.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

7.3 Specific end use(s)

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL
Dec-1-ene, dimers, hydrogenated : End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 60 mg/m3

8.2 Exposure controls

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Engineering measures

Maintain air concentrations below occupational exposure standards.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment

- | | |
|------------------------|--|
| Respiratory protection | : In the case of vapour formation use a respirator with an approved filter. |
| Hand protection | : For prolonged or repeated contact use protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. |
| Eye protection | : Safety glasses with side-shields conforming to EN166 |
| Hygiene measures | : Wash face, hands and any exposed skin thoroughly after handling. |
| Protective measures | : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. |

Environmental exposure controls

- | | |
|----------------|--|
| General advice | : Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. |
|----------------|--|

9. Physical and chemical properties

The data/values refer to the main component.

9.1 Information on basic physical and chemical properties

- | | |
|------------|------------------|
| Appearance | : liquid |
| Colour | : yellow |
| Odour | : characteristic |

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| | |
|--|---|
| Odour Threshold | : No data available |
| pH | : No data available |
| Melting point/range | : No data available |
| Boiling point/boiling range | : No data available |
| Flash point | : > 200 °C, Test Method: open cup, ISO 2592 |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : No data available |
| Lower explosion limit | : No data available |
| Upper explosion limit | : No data available |
| Vapour pressure | : < 0.17 hPa, 20 °C |
| Relative vapour density | : No data available |
| Density | : 0.84 g/cm ³ , 20 °C |
| Water solubility | : insoluble |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : No data available |
| Ignition temperature | : No data available |
| Viscosity, dynamic | : No data available |
| Viscosity, kinematic | : 22 mm ² /s, 40 °C |
| Oxidizing properties | : No data available |

9.2 Other information

| | |
|-------------------|---------------------|
| Sublimation point | : No data available |
| Bulk density | : No data available |

10. Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

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11. Toxicological information

11.1 Information on toxicological effects

Product

| | |
|-----------------------------------|--|
| Acute oral toxicity | : This information is not available. |
| Acute inhalation toxicity | : Acute toxicity estimate: > 5 mg/l, 4 h, dust/mist, Calculation method |
| Skin corrosion/irritation | : This information is not available. |
| Serious eye damage/eye irritation | : This information is not available. |
| Respiratory or skin sensitisation | : This information is not available. |
| Carcinogenicity | : No data available |
| Reproductive toxicity | : No data available |
| Teratogenicity | : No data available |
| Repeated dose toxicity | : This information is not available. |
| Aspiration toxicity | : This information is not available. |
| Further information | : Information given is based on data on the components and the toxicology of similar products. |

Components:

Dec-1-ene, dimers, hydrogenated :

| | |
|-----------------------------------|---|
| Acute oral toxicity | : LD50: > 5,000 mg/kg, rat, OECD Test Guideline 401, GLP: yes |
| Acute inhalation toxicity | : LC50: 1.17 mg/l, 4 h, rat, dust/mist, OECD Test Guideline 403, GLP: yes |
| Acute dermal toxicity | : LD50: > 3,000 mg/kg, rabbit, OECD Test Guideline 402 |
| Skin corrosion/irritation | : rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404 |
| Serious eye damage/eye irritation | : rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405 |
| Respiratory or skin sensitisation | : Maximisation Test (GPMT), guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406, GLP: yes |
| Aspiration toxicity | : May be fatal if swallowed and enters airways. |

12. Ecological information

12.1 Toxicity

Product:

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| | | |
|---|---|-------------------|
| Toxicity to fish | : | No data available |
| Toxicity to daphnia and other aquatic invertebrates | : | No data available |
| Toxicity to algae | : | No data available |
| Toxicity to bacteria | : | No data available |

Components:

Dec-1-ene, dimers, hydrogenated :

| | | |
|--|---|---|
| Toxicity to fish | : | LC50: > 1,000 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, OECD Test Guideline 203, GLP: yes |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50: > 1,000 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes |
| Toxicity to algae | : | EC50: > 1,000 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae), static test, OECD Test Guideline 201, GLP: yes |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC: 125 mg/l, 21 d, Daphnia magna (Water flea), OECD Test Guideline 211, GLP: yes |

12.2 Persistence and degradability

Product:

| | | |
|-------------------------------|---|-------------------|
| Biodegradability | : | No data available |
| Physico-chemical removability | : | No data available |

Components:

Dec-1-ene, dimers, hydrogenated :

| | | |
|------------------|---|-----------------------------------|
| Biodegradability | : | Result: not rapidly biodegradable |
|------------------|---|-----------------------------------|

12.3 Bioaccumulative potential

Product:

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

12.4 Mobility in soil

Product:

| | | |
|---|---|-------------------|
| Mobility | : | No data available |
| Distribution among environmental compartments | : | No data available |

12.5 Results of PBT and vPvB assessment

Product:

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Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Dec-1-ene, dimers, hydrogenated :

Assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

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ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

No data available

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

Not available

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: not applicable

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

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

R20 Harmful by inhalation.
R65 Harmful: may cause lung damage if swallowed.

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

H304 May be fatal if swallowed and enters airways.
H332 Harmful if inhaled.

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