SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Identification of the substance
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Registration number (REACH) 01-2119458049-33-0003
EC number 919-446-0
Index No -
CAS number 64742-82-1
Additional relevant and available information
Hydrosol P150
Hydrosol P150 SR
White Spirit
Hydrosol P155/185

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
manufacture of substances
Distribution of substance
Formulation & (re)packaging of substances and mixtures
Uses in Coatings
Use in laboratories
Use in Cleaning Agents
Use in Agrochemicals
Lubricants
Functional Fluids
Metal working fluids / rolling oils
Use in Oil and Gas field drilling and production operations
Polymer production
Water treatment chemicals
Use as a fuel
Rubber production and processing

1.3 Details of the supplier of the safety data sheet
DHC Solvent Chemie GmbH
Timmerhellstraße 28
D-45478 Mülheim an der Ruhr
Germany

Telephone: +49 (208) 9940-0
Telefax: +49 (208) 9940-150

Competent person responsible for the safety data sheet
Vanessa Manz

e-mail (competent person)
productsafety@dhc-solvent.de

1.4 Emergency telephone number
Emergency information service

<table>
<thead>
<tr>
<th>Poison centre</th>
<th>Country</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United Kingdom</td>
<td>+44 1235 239670</td>
</tr>
</tbody>
</table>
SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>flammable liquid</td>
<td>Cat. 3</td>
<td>(Flam. Liq. 3)</td>
<td>H226</td>
</tr>
<tr>
<td>specific target organ toxicity - single exposure (narcotic effects, drowsiness)</td>
<td>Cat. 3</td>
<td>(STOT SE 3)</td>
<td>H336</td>
</tr>
<tr>
<td>specific target organ toxicity - repeated exposure</td>
<td>Cat. 1</td>
<td>(STOT RE 1)</td>
<td>H372</td>
</tr>
<tr>
<td>aspiration hazard</td>
<td>Cat. 1</td>
<td>(Asp. Tox. 1)</td>
<td>H304</td>
</tr>
<tr>
<td>hazardous to the aquatic environment - chronic hazard</td>
<td>Cat. 2</td>
<td>(Aquatic Chronic 2)</td>
<td>H411</td>
</tr>
</tbody>
</table>

Remarks
For full text of H-phrases: see SECTION 16.
The classification as a carcinogen or mutagen is not required. The substance contains less than 0.1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310- P331 shall apply.

Supplemental hazard information
Supplemental hazard information.
EUH066 Repeated exposure may cause skin dryness or cracking.

The most important adverse physicochemical, human health and environmental effects
May be fatal if swallowed and enters airways.
The product is combustible and can be ignited by potential ignition sources.

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

Signal word Danger

Pictograms
GHS02, GHS07, GHS08, GHS09

Hazard statements
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
Precautionary statements - prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P260 Do not breathe mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction.
Precautionary statements - storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary statements - disposal
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional labelling requirements
EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards
According to the results of its assessment, this substance is not a PBT or a vPvB. Vapour heavier than air, may form an explosive mixture in air: it may be ignited at some distance away from the spill resulting in flashbacks. Flowing product can create electrostatic charge, resulting sparks may ignite or cause an explosion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Name of substance Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Registration number (REACH) 01-2119458049-33-0003
EC number 919-446-0
CAS number 64742-82-1
Index No -
Purity 100 %

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact
Wash with plenty of soap and water.

Following eye contact
Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion
Do NOT induce vomiting. Rinse mouth with water (only if the person is conscious).

4.2 Most important symptoms and effects, both acute and delayed
Choking and suffocation risks. Narcotic effects. Deficits in perception and coordination, reaction time, or sleepiness.

4.3 Indication of any immediate medical attention and special treatment needed
none
SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
   Suitable extinguishing media
   carbon dioxide (CO2), BC-powder, foam, alcohol resistant foam, water mist
   Unsuitable extinguishing media
   water jet

5.2 Special hazards arising from the substance or mixture
   Solvent vapours are heavier than air and may spread along floors. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. May produce toxic fumes of carbon monoxide if burning.
   Hazardous combustion products
   carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters
   Wear breathing apparatus if exposed to vapours/dust/spray/gases. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Keep containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel
   Remove persons to safety. Avoid inhaling sprayed product. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Take off immediately all contaminated clothing and wash it before reuse.
   For emergency responders
   Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions
   Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up
   Advices on how to contain a spill
   Covering of drains.
   Advices on how to clean up a spill
   Cover with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).
   Appropriate containment techniques
   Use of adsorbent materials. - covering of drains
   Other information relating to spills and releases
   Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections
SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Recommendations

• Measures to prevent fire as well as aerosol and dust generation

Use only in well-ventilated areas. Use local and general ventilation. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

• Warning

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

• Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

• Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

• Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

• Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

Suitable materials and coatings for container/equipment: Carbon Steel, Stainless Steel, Polyester, Polytetrafluoroethylene (PTFE), Polyvinyl Alcohol (PVA)

Unsuitable Materials and Coatings for container/equipment: Butyl Rubber, Natural Rubber, Ethylene-propylene-diene monomer (EPDM), Polystyrene, Polyethylene, Polycrylonitrile.

7.3 Specific end use(s)

See attached exposure scenarios

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>64742-82-1</td>
<td>AGW</td>
<td>150</td>
<td></td>
<td>300</td>
<td></td>
<td>TRGS 900</td>
</tr>
</tbody>
</table>

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified).

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified).
### Relevant DNELs/DMELs/PNECs and other threshold levels

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>47 mg/kg</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>330 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>28 mg/kg</td>
<td>human, oral</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>28 mg/kg</td>
<td>human, oral</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>71 mg/m³</td>
<td>human, inhalatory</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

#### Appropriate engineering controls

Technical measures and the appliance of appropriate working methods take priority over the use of personal protective equipment.

Safety and necessary control measures vary according to exposure conditions. Appropriate measures are:

- Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange (see attached exposure scenarios).

#### Individual protection measures (personal protective equipment)

**Eye/face protection**

Use safety goggles with side protection.

**Skin protection**

- **hand protection**

  Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.
  
  Short-term contact with the skin: Disposable gloves
  
  Long-term contact with the skin: Gloves with long cuffs
  
  Check leak-tightness/impermeability prior to use.

- **type of material**
  
  NBR: acrylonitrile-butadiene rubber, FKM: fluoro-elastomer

- **material thickness**
  
  0,40 mm.

- **breakthrough times of the glove material**
  
  >480 minutes (permeation: level 6)

- **other protection measures**

  Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

  Body protection:

  Suitable protective clothing: Flame resistant clothing

  Suitable safety shoes: Anti static safety shoes according to EN 345 S3

**Respiratory protection**

For activities in enclosed areas at elevated temperatures of the substance, local extraction or explosion protected ventilation equipment is recommended. In case this is not sufficient for the intended use, then apply a suitable respiratory protection according to EN 140 type A or better (see exposure scenarios).

**Environmental exposure controls**

Do not empty into drains.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

**Appearance**
- Physical state: liquid
- Colour: colourless
- Odour: pungent

**Other physical and chemical parameters**
- **pH (value):** not determined
- Melting point/freezing point: < -20 °C (ASTM D 97)
- Initial boiling point and boiling range: 135 – 220 °C (ASTM D 86)
- Flash point: > 30 °C (ASTM D 56)
- Explosive limits
  - lower explosion limit (LEL): 0.6 vol%
  - upper explosion limit (UEL): 7 vol%
- Vapour pressure: 0.231 kPa at 20 °C
- Density: 0.72 – 0.825 g/cm³ at 15 °C
- Solubility(ies): not determined
- Partition coefficient
- n-octanol/water (log KOW): This information is not available.
- Auto-ignition temperature: > 200 °C
- Viscosity
  - kinematic viscosity: 1 – 2.5 mm²/s at 20 °C (ASTM D 445)

9.2 Other information

- Surface tension: 24 – 27 mN/m (25 °C) (Wilhelmy Plate)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

- risk of ignition
- if heated: risk of ignition

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure (see below "Conditions to avoid").

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Hints to prevent fire or explosion**

Use only non-sparking tools.

10.5 Incompatible materials

oxidisers

10.6 Hazardous decomposition products

No known hazardous decomposition products.
SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity
Shall not be classified as acutely toxic.

• Acute toxicity estimate (ATE)
  inhalation: vapour 13.1 mg/l/4h

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>oral</td>
<td>LD50</td>
<td>&gt;15,000 mg/kg</td>
<td>rat</td>
</tr>
<tr>
<td>inhalation: vapour</td>
<td>LC50</td>
<td>&gt;13.1 mg/l/4h</td>
<td>rat</td>
</tr>
<tr>
<td>dermal</td>
<td>LD50</td>
<td>3,400 mg/kg</td>
<td>rabbit</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties
Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)
• Specific target organ toxicity - single exposure
  May cause drowsiness or dizziness.

• Specific target organ toxicity - repeated exposure
  Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
May be fatal if swallowed and enters airways.

Information on likely routes of exposure
If on skin. If inhaled.

Other information
Repeated exposure may cause skin dryness or cracking.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity (acute)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL50</td>
<td>10 mg/l</td>
<td>rainbow trout (Oncorhynchus mykiss)</td>
<td>96 h</td>
</tr>
<tr>
<td>EL50</td>
<td>10 mg/l</td>
<td>daphnia magna</td>
<td>48 h</td>
</tr>
<tr>
<td>EL50</td>
<td>4.6 mg/l</td>
<td>algae</td>
<td>72 h</td>
</tr>
</tbody>
</table>

Aquatic toxicity (chronic)
May cause long-term adverse effects in the aquatic environment.
## 12.2 Persistence and degradability
The substance is readily biodegradable.

## 12.3 Bioaccumulative potential
Data are not available.

## 12.4 Mobility in soil
Data are not available.

## 12.5 Results of PBT and vPvB assessment
According to the results of its assessment, this substance is not a PBT or a vPvB.

## 12.6 Other adverse effects
Data are not available.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

##### Waste treatment-relevant information
Solvent reclamation/regeneration.

##### Sewage disposal-relevant information
Do not empty into drains.

##### Waste treatment of containers/packagings
Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

##### List of wastes
Proposed waste code(s) for the used product:
07 01 04x Other organic solvents, washing liquids and mother liquors

##### Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1 UN number
1300

#### 14.2 UN proper shipping name
TURPENTINE SUBSTITUTE

#### 14.3 Transport hazard class(es)
Class 3 (flammable liquids)

#### 14.4 Packing group
III (substance presenting low danger)

#### 14.5 Environmental hazards
hazardous to the aquatic environment

#### 14.6 Special precautions for user
Provisions for dangerous goods (ADR) should be complied within the premises.
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

- Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
  
  | UN number | 1300 |
  | Proper shipping name | TURPENTINE SUBSTITUTE |
  | Technical name (hazardous constituents) | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |
  | Class | 3 |
  | Classification code | F1 |
  | Packing group | III |
  | Danger label(s) | 3 + "fish and tree" |

- Environmental hazards: yes (hazardous to the aquatic environment)
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 5 L
- Transport category (TC): 3
- Tunnel restriction code (TRC): D/E
- Hazard identification No: 30

Emergency Action Code

- 3YE

- Special provisions (SP): 223
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 5 L
- EmS: F-E, S-E
- Stowage category: A

- International Civil Aviation Organization (ICAO-IATA/DGR)
  
  | UN number | 1300 |
  | Proper shipping name | Turpentine substitute |
  | Class | 3 |
  | Environmental hazards | yes (hazardous to the aquatic environment) |
  | Packing group | III |
  | Danger label(s) | 3 + "fish and tree" |

- Special provisions (SP): 223
SECTION 15: REGULATORY INFORMATION

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

Relevant provisions of the European Union (EU)

- Restrictions according to REACH, Annex XVII

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Wt%</th>
<th>Type of registration</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>100</td>
<td>1907/2006/EC annex XVII</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>100</td>
<td>1907/2006/EC annex XVII</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

- List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list
  - not listed
- 2012/18/EU (Seveso III)
- 2012/18/EU (Seveso III)

<table>
<thead>
<tr>
<th>No</th>
<th>Dangerous substance/hazard categories</th>
<th>Qualifying quantity (tonnes) for the application of lower and upper-tier requirements</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2</td>
<td>environmental hazards (hazardous to the aquatic environment, cat. 2)</td>
<td>200</td>
<td>500</td>
</tr>
</tbody>
</table>

Notation
57) Hazardous to the Aquatic Environment in category Chronic 2.

- Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)
  - VOC content 100 %
- Directive on industrial emissions (VOCs, 2010/75/EU)
  - VOC content 100 %
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II
  - not listed
- Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
  - not listed
- Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)
  - not listed

National inventories
### Country Inventory Status

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>AICS</td>
<td>substance is listed</td>
</tr>
<tr>
<td>CA</td>
<td>DSL</td>
<td>substance is listed</td>
</tr>
<tr>
<td>CA</td>
<td>NDSL</td>
<td>not listed</td>
</tr>
<tr>
<td>CN</td>
<td>IECSC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>EU</td>
<td>ECSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>EU</td>
<td>REACH Reg.</td>
<td>substance is listed</td>
</tr>
<tr>
<td>JP</td>
<td>CSCL-ENCS</td>
<td>not listed</td>
</tr>
<tr>
<td>JP</td>
<td>ISHA-ENCS</td>
<td>not listed</td>
</tr>
<tr>
<td>KR</td>
<td>KECI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>MX</td>
<td>INSQ</td>
<td>substance is listed</td>
</tr>
<tr>
<td>NZ</td>
<td>NZIoC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>PH</td>
<td>PICCS</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TR</td>
<td>CICR</td>
<td>substance is listed</td>
</tr>
<tr>
<td>TW</td>
<td>TCSI</td>
<td>substance is listed</td>
</tr>
<tr>
<td>US</td>
<td>TSCA</td>
<td>substance is listed</td>
</tr>
</tbody>
</table>

**Legend**

- AICS: Australian Inventory of Chemical Substances.
- CICR: Chemical Inventory and Control Regulation.
- CSCL-ENCS: List of Existing and New Chemical Substances (CSCL-ENCS).
- DSL: Domestic Substances List (DSL).
- ECSI: EC Substance Inventory (EINECS, ELINCS, NLP).
- IECSC: Inventory of Existing Chemical Substances Produced or Imported in China.
- INSQ: National Inventory of Chemical Substances.
- ISHA-ENCS: Inventory of Existing and New Chemical Substances (ISHA-ENCS).
- KECI: Korea Existing Chemicals Inventory.
- NDSL: Non-domestic Substances List (NDSL).
- NZIoC: New Zealand Inventory of Chemicals.
- PICCS: Philippine Inventory of Chemicals and Chemical Substances.
- REACH Reg.: REACH registered substances.
- TCSI: Taiwan Chemical Substance Inventory.
- TSCA: Toxic Substance Control Act.

### 15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has been carried out.

### SECTION 16: OTHER INFORMATION

#### 16.1 Indication of changes (revised safety data sheet)

<table>
<thead>
<tr>
<th>Section</th>
<th>Former entry (text/value)</th>
<th>Actual entry (text/value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>For non-emergency personnel: Remove persons to safety. Avoid inhaling sprayed product. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Remove/take off immediately all contaminated clothing and wash it before reuse.</td>
<td>For non-emergency personnel: Remove persons to safety. Avoid inhaling sprayed product. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Take off immediately all contaminated clothing and wash it before reuse.</td>
</tr>
<tr>
<td>8.1</td>
<td>Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)</td>
<td>Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)</td>
</tr>
</tbody>
</table>
# Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>AGW</td>
<td>Workplace exposure limit</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substance of Very High Concern</td>
</tr>
<tr>
<td>TRGS 900</td>
<td>Arbeitsplatzgrenzwerte (TRGS 900)</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

## Key literature references and sources for data
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- The exposure scenarios are available at www.dhc-solvent.de in the Service section.
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG).
International Air Transport Association (IATA).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

Disclaimer
This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. The information concerning legal regulations can lay no claim to completeness. In addition to this, other provisions may also apply to the product.