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

1.1 Product identifier
Identification of the substance
Hydrocarbons, C9, aromatics
Registration number (REACH) 01-2119455851-35-0002
EC number 918-668-5
Index No 649-356-00-4
CAS number 64742-95-6
Additional relevant and available information
Hydrosol A170
Hydrosol A170 B
Hydrosol A170 SNL
Hydrosol A160/180
Hydrosol P140/280

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

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>Country</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<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 (respiratory tract irritation)</td>
<td>Cat. 3</td>
<td>(STOT SE 3)</td>
<td>H335</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>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.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
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.
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, aromatics
Registration number (REACH) 01-2119455851-35-0002
EC number 918-668-5
CAS number 64742-95-6
Index No 649-356-00-4
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

Advice on how to contain a spill
Covering of drains.

Advice on how to clean up a spill
Wipe up 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, Polyacrylonitrile.

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, aromatics</td>
<td>64742-95-6</td>
<td>AGW</td>
<td>50</td>
<td>100</td>
<td>TRGS 900</td>
<td></td>
<td></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>25 mg/kg</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>150 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>11 mg/kg</td>
<td>human, oral</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>11 mg/kg</td>
<td>human, oral</td>
<td>consumer (private households)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>DNEL</td>
<td>32 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: -30 °C at 1,013 mbar (ASTM D 97)
- Initial boiling point and boiling range: 140 – 200 °C at 1,013 mPa (ASTM D 86)
- Flash point: >35 °C at 1,013 mbar
- Explosive limits
  - lower explosion limit (LEL): 0.7 vol%
  - upper explosion limit (UEL): 7 vol%
- Vapour pressure: <1 kPa at 20 °C
- Density: 0.8 – 0.95 g/cm³ at 25 °C
- Solubility(ies): not determined
- Partition coefficient
- n-octanol/water (log KOW): This information is not available.
- Auto-ignition temperature: 400 °C
- Viscosity
  - kinematic viscosity: 0.7 – 1.7 mm²/s at 20 °C (ASTM D 445)
- Explosive properties
  - in use, may form flammable/explosive vapour-air mixture
- Oxidising properties: none

9.2 Other information
- Surface tension: 28 – 31 mN/m (25 °C) (Wilhelmy Plate)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
- risk of ignition
  - if heated

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.

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.

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>dermal</td>
<td>LD50</td>
<td>&gt;3,160 mg/kg</td>
<td>rabbit</td>
</tr>
<tr>
<td>oral</td>
<td>LD50</td>
<td>3,592 mg/kg</td>
<td>rat</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 respiratory irritation. May cause drowsiness or dizziness.

• Specific target organ toxicity - repeated exposure
  Shall not be classified as a specific target organ toxicant (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>9.2 mg/l</td>
<td>rainbow trout (Oncorhynchus mykiss)</td>
<td>96 h</td>
</tr>
<tr>
<td>EL50</td>
<td>3.2 mg/l</td>
<td>daphnia magna</td>
<td>48 h</td>
</tr>
<tr>
<td>EL50</td>
<td>2.6 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.

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOELR</td>
<td>1.23 mg/l</td>
<td>rainbow trout (Oncorhynchus mykiss)</td>
<td>28 d</td>
</tr>
<tr>
<td>NOELR</td>
<td>2.14 mg/l</td>
<td>daphnia magna</td>
<td>21 d</td>
</tr>
</tbody>
</table>
12.2 Persistence and degradability
The substance is readily biodegradable.

<table>
<thead>
<tr>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>oxygen depletion</td>
<td>78 %</td>
<td>28 d</td>
</tr>
</tbody>
</table>

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 re-conditioned 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
PETROLEUM DISTILLATES, N.O.S.

14.2 UN proper shipping name
SOLVENT NAPHTHA, Hydrocarbons, C9, aromatics

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
Note that this product is being carried under the scope of MARPOL Annex I.
Information for each of the UN Model Regulations

- Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

<table>
<thead>
<tr>
<th>UN number</th>
<th>1268</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>PETROLEUM DISTILLATES, N.O.S.</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Classification code</td>
<td>F1</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Danger label(s)</td>
<td>3 + &quot;fish and tree&quot;</td>
</tr>
</tbody>
</table>

Environmental hazards | yes (hazardous to the aquatic environment) |
Special provisions (SP) | 664 |
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 |

Not subject to IMDG.

- International Maritime Dangerous Goods Code (IMDG)

<table>
<thead>
<tr>
<th>UN number</th>
<th>1268</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>PETROLEUM DISTILLATES, N.O.S.</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>yes (hazardous to the aquatic environment)</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Danger label(s)</td>
<td>3 + &quot;fish and tree&quot;</td>
</tr>
</tbody>
</table>

Special provisions (SP) | 223, 955 |
Excepted quantities (EQ) | E1 |
Limited quantities (LQ) | 5 L |
EmS | F-E, S-E |
Stowage category | A |

- International Civil Aviation Organization (ICAO-IATA/DGR)

<table>
<thead>
<tr>
<th>UN number</th>
<th>1268</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Petroleum distillates, n.o.s.</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>yes (hazardous to the aquatic environment)</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Danger label(s)</td>
<td>3</td>
</tr>
</tbody>
</table>
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, aromatics</td>
<td>100</td>
<td>1907/2006/EC annex XVII</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C9, aromatics</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)

<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**

<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>
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</tr>
<tr>
<td>CN</td>
<td>IECSC</td>
<td>substance is listed</td>
</tr>
<tr>
<td>Country</td>
<td>Inventory</td>
<td>Status</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>--------------</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>substance is listed</td>
</tr>
<tr>
<td>JP</td>
<td>ISHA-ENCS</td>
<td>substance is 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>
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</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>
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</thead>
<tbody>
<tr>
<td>15.1</td>
<td></td>
<td>National inventories: change in the listing (table)</td>
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</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>
</tbody>
</table>
**Abbreviations and Descriptions**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>“Globally Harmonized System of Classification and Labelling of Chemicals” 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 “Marine Pollutant”)</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>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness.</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.