Dichlofenthion Formulation

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name: Dichlofenthion Formulation

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture: Veterinary product

1.3 Details of the supplier of the safety data sheet
   Company: MSD
   Walton Manor, Walton
   MK7 7AJ Milton Keynes - United Kingdom
   Telephone: 908-740-4000
   Telefax: 908-735-1496
   E-mail address of person responsible for the SDS: EHSDATASTEWARD@msd.com

1.4 Emergency telephone number
   1-908-423-6000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Flammable liquids, Category 3
   Acute toxicity, Category 4
   Skin corrosion, Sub-category 1B
   Serious eye damage, Category 1
   Skin sensitisation, Category 1
   Germ cell mutagenicity, Category 2
   Carcinogenicity, Category 1A
   Reproductive toxicity, Category 2
   Specific target organ toxicity - single exposure, Category 1
   Specific target organ toxicity - single exposure, Category 3
   Specific target organ toxicity - repeated exposure, Category 2
   Aspiration hazard, Category 1
   Short-term (acute) aquatic hazard, Category 1
   Long-term (chronic) aquatic hazard, Category 1
   H226: Flammable liquid and vapour.
   H302: Harmful if swallowed.
   H314: Causes severe skin burns and eye damage.
   H318: Causes serious eye damage.
   H317: May cause an allergic skin reaction.
   H341: Suspected of causing genetic defects.
   H350: May cause cancer if swallowed.
   H361d: Suspected of damaging the unborn child.
   H370: Causes damage to organs.
   H335: May cause respiratory irritation.
   H373: May cause damage to organs through prolonged or repeated exposure.
   H304: May be fatal if swallowed and enters airways.
   H400: Very toxic to aquatic life.
   H410: Very toxic to aquatic life with long lasting effects.
2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:

- ☢️ Flammable liquid and vapour.
- ⚠️ Harmful if swallowed.
- ⚠️ May be fatal if swallowed and enters airways.
- ⚠️ Causes severe skin burns and eye damage.
- ⚠️ May cause an allergic skin reaction.
- ⚠️ May cause respiratory irritation.
- ⚠️ Suspected of causing genetic defects.
- ⚠️ May cause cancer if swallowed.
- ⚠️ Suspected of damaging the unborn child.
- ⚠️ Causes damage to organs.
- ⚠️ May cause damage to organs through prolonged or repeated exposure.
- ☢️ Very toxic to aquatic life with long lasting effects.

Signal word: Danger

Hazard statements:
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer if swallowed.
- H361d Suspected of damaging the unborn child.
- H370 Causes damage to organs.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements:
- EUH071 Corrosive to the respiratory tract.

Precautionary statements:
- Prevention:
  - P201 Obtain special instructions before use.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
- P391 Collect spillage.

Hazardous components which must be listed on the label:
- Tar, wood
- Rosin
- Tar, coal
- Ethylbenzene
- Dichlofenthion (ISO)
- Sodium hydroxide
- Phenol

Additional Labelling:
- Restricted to professional users.
## 2.3 Other hazards

Vapours may form explosive mixture with air.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tar, wood</td>
<td>91722-33-7</td>
<td>294-436-0</td>
<td></td>
<td>Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1B; H317 Aquatic Chronic 3; H412</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Tar, coal</td>
<td>8007-45-2</td>
<td>232-361-7</td>
<td>648-081-00-7</td>
<td>Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317 Muta. 2; H341 Carc. 1A; H350 STOT SE 1; H370 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 2; H411</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>202-849-4</td>
<td>601-023-00-4</td>
<td>Flam. Liq. 2; H225 Acute Tox. 4; H332 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>215-535-7</td>
<td>601-022-00-9</td>
<td>Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>Dichlofenthion (ISO)</td>
<td>97-17-6</td>
<td>202-564-5</td>
<td>015-068-00-7</td>
<td>Acute Tox. 3; H301 Acute Tox. 4; H332 Acute Tox. 3; H311 Repr. 2; H361d STOT RE 1; H372 Aquatic Acute 1; H400</td>
<td>&gt;= 3 - &lt; 10</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

Protection of first-aiders: First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

If inhaled: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing.

For explanation of abbreviations see section 16.
In case of eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention immediately.

If swallowed: If swallowed, DO NOT induce vomiting. If vomiting occurs have person lean forward. Call a physician or poison control centre immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed
Risks: Harmful if swallowed. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer if swallowed. Suspected of damaging the unborn child. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure. Corrosive to the respiratory tract. Causes severe burns.

Causes digestive tract burns.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance. Vapours may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.

Hazardous combustion products:
- Carbon oxides
- Metal oxides
- Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters:
- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.

Specific extinguishing methods:
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Use water spray to cool unopened containers.
- Remove undamaged containers from fire area if it is safe to do so.
- Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Remove all sources of ignition.
- Use personal protective equipment.
- Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions

Environmental precautions:
- Discharge into the environment must be avoided.
- Prevent further leakage or spillage if safe to do so.
- Prevent spreading over a wide area (e.g. by containment or oil barriers).
- Retain and dispose of contaminated wash water.
- Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up:
- Non-sparking tools should be used.
- Soak up with inert absorbent material.
- Suppress (knock down) gases/vapours/mists with a water spray jet.
- For large spills, provide dyking or other appropriate containement to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
- Clean up remaining materials from spill with suitable absorbent.
- Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
- Sections 13 and 15 of this SDS provide information regarding
6.4 Reference to other sections
See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.
Do not breathe vapours or spray mist.
Do not swallow.
Do not get in eyes.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
Non-sparking tools should be used.
Keep container tightly closed.
Already sensitised individuals should consult their physician regarding working with respiratory irritants or sensitisers.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.
The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Advice on common storage : Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures, which in contact with water, emit flammable gases
Explosives
Gases

7.3 Specific end use(s)
Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
<td>TWA (Fumes)</td>
<td>0.05 mg/m3</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma. Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance. The word ‘fume’ is often used to include gases and vapours. This is not the case for exposure limits where ‘fume’ should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown. Capable of causing occupational asthma. The ‘Sen’ notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE’s asthma web pages (www.hse.gov.uk/asthma) provide further information.
Dichlofenthion Formulation

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Sampling time</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>STEL (Fumes) 0.15 mg/m³ TWA 100 ppm 442 mg/m³</td>
<td>GB EH40</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Identifies the possibility of significant uptake through the skin, Indicative</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL 200 ppm 884 mg/m³ TWA 100 ppm 441 mg/m³</td>
<td>GB EH40</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>STEL 125 ppm 552 mg/m³ TWA 50 ppm 221 mg/m³</td>
<td>GB EH40</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Identifies the possibility of significant uptake through the skin, Indicative</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL 100 ppm 442 mg/m³ TWA 50 ppm 220 mg/m³</td>
<td>GB EH40</td>
<td>2000/39/EC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dichlofenthion (ISO)</td>
<td>97-17-6</td>
<td>STEL 100 ppm 441 mg/m³ TWA 20 µg/m³ (OEB 3)</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Skin Wipe limit 200 µg/100 cm²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>STEL 2 mg/m³ TWA 2 ppm 8 mg/m³</td>
<td>GB EH40</td>
<td>2009/161/EU</td>
</tr>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>STEL 4 ppm 16 mg/m³ TWA 2 ppm 7.8 mg/m³</td>
<td>Internal</td>
<td>2009/161/EU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Biological occupational exposure limits**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Sampling time</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>methyl hippuric acid: 650 Millimoles per mole Creatinine</td>
<td>After shift</td>
<td>GB EH40 BAT</td>
</tr>
</tbody>
</table>

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### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosin</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>117 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>17 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>35 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>10 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long-term systemic effects</td>
<td>10 mg/kg bw/day</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term local effects</td>
<td>1 mg/m³</td>
</tr>
<tr>
<td>Tar, wood</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term local effects</td>
<td>70.53 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term local effects</td>
<td>355.56 mg/m³</td>
</tr>
<tr>
<td>Phenol</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>16 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>1.23 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>1.32 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0.4 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long-term systemic effects</td>
<td>0.4 mg/kg bw/day</td>
</tr>
<tr>
<td>m-Cresol</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>343 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0.5 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Acute systemic effects</td>
<td>1.47 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>0.75 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0.72 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Long-term systemic effects</td>
<td>0.25 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Acute systemic effects</td>
<td>0.74 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>Acute systemic effects</td>
<td>0.74 mg/kg</td>
</tr>
</tbody>
</table>
### Dichlofenthion Formulation

<table>
<thead>
<tr>
<th>Substance</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosin</td>
<td>Fresh water</td>
<td>0.0016 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.00016 mg/l</td>
</tr>
</tbody>
</table>

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Cresol</td>
<td>Workers Inhalation</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers Inhalation</td>
<td>7 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers Skin contact</td>
<td>0.5 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers Skin contact</td>
<td>1 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>0.75 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Inhalation</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Skin contact</td>
<td>0.25 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Skin contact</td>
<td>0.5 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Ingestion</td>
<td>0.25 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>Workers Inhalation</td>
<td>221 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers Inhalation</td>
<td>442 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Workers Inhalation</td>
<td>221 mg/m³</td>
</tr>
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<td></td>
</tr>
<tr>
<td></td>
<td>Workers Inhalation</td>
<td>212 mg/m³</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Workers Skin contact</td>
<td>125 mg/kg bw/day</td>
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<tr>
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<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>65.3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Inhalation</td>
<td>260 mg/m³</td>
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<tr>
<td></td>
<td>Acute systemic effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Inhalation</td>
<td>65.3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term local effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumers Skin contact</td>
<td>125 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Workers Inhalation</td>
<td>77 mg/m³</td>
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<td>Long-term systemic effects</td>
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<tr>
<td></td>
<td>Workers Inhalation</td>
<td>293 mg/m³</td>
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<td>Acute local effects</td>
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</tr>
<tr>
<td></td>
<td>Workers Skin contact</td>
<td>180 mg/kg bw/day</td>
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<td>Long-term systemic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
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<td></td>
<td>Consumers Ingestion</td>
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<td>Substance</td>
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<td>Marine water</td>
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<tr>
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</tr>
<tr>
<td>Dichlofenthion</td>
<td>0.003 mg/l</td>
<td>0 mg/l</td>
</tr>
<tr>
<td>m-Cresol</td>
<td>0.1 mg/l</td>
<td>0.01 mg/l</td>
</tr>
<tr>
<td>p-Cresol</td>
<td>0.1 mg/l</td>
<td>0.01 mg/l</td>
</tr>
<tr>
<td>Xylene</td>
<td>0.327 mg/l</td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.1 mg/l</td>
<td>0.1 mg/l</td>
</tr>
<tr>
<td>Tar, wood</td>
<td>0.003 mg/l</td>
<td>0 mg/l</td>
</tr>
<tr>
<td>Phenol</td>
<td>0.0077 mg/l</td>
<td>0.00077 mg/l</td>
</tr>
</tbody>
</table>

**Oral (Secondary Poisoning):**

- 20 mg/kg food
8.2 Exposure controls

Engineering measures
Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).
Minimize open handling.

Personal protective equipment
Eye protection : Wear safety glasses with side shields or goggles.
If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

Hand protection
Material : Chemical-resistant gloves
Remarks : Consider double gloving. Take note that the product is flammable, which may impact the selection of hand protection.

Skin and body protection : Work uniform or laboratory coat.
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.
Use appropriate degowning techniques to remove potentially contaminated clothing.

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
Equipment should conform to BS EN 14387
Filter type : Combined particulates and organic vapour type (A-P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance : viscous liquid
Colour : dark, brown
Odour : strong
Odour Threshold : No data available
pH : Not applicable
Melting point/freezing point : No data available
Initial boiling point and boiling range : No data available
Flash point : 30 °C
Evaporation rate : No data available
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Dichlofenthion Formulation

Flammability (solid, gas) : Not applicable
Upper explosion limit / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Density : 1.009 - 1.051 g/cm³ (20 °C)
Solubility(ies)
  Water solubility : No data available
  Partition coefficient: n-octanol/water : Not applicable
  Auto-ignition temperature : No data available
  Decomposition temperature : No data available
Viscosity
  Viscosity, kinematic : No data available
Explosive properties : Not explosive
Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information
Flammability (liquids) : Not applicable
Particle size : Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity
Not classified as a reactivity hazard.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions : Flammable liquid and vapour. Vapours may form explosive mixture with air. Can react with strong oxidizing agents.

10.4 Conditions to avoid
Conditions to avoid : Heat, flames and sparks.
10.5 Incompatible materials

   Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

   No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure:
   Inhalation
   Skin contact
   Ingestion
   Eye contact

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 1,713 mg/kg
   Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
   Exposure time: 4 h
   Test atmosphere: vapour
   Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
   Method: Calculation method

Components:

Tar, wood:
   Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
   Method: OECD Test Guideline 423
   Assessment: The substance or mixture has no acute oral toxicity

Rosin:
   Acute oral toxicity : LD50 (Rat): 2,800 mg/kg
   Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
   Method: OECD Test Guideline 402
   Assessment: The substance or mixture has no acute dermal toxicity

Tar, coal:
   Acute oral toxicity : LD50 (Rat): 1,700 mg/kg
   Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Ethylbenzene:
Acute oral toxicity : LD50 (Rat): 3,500 mg/kg
Acute inhalation toxicity : LC50 (Rat): 17.8 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Xylene:
Acute oral toxicity : LD50 (Rat): 3,523 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: 11 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Expert judgement
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI
Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
Method: Expert judgement
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Dichlofenthion (ISO):
Acute oral toxicity : LD50 (Rat): 172 mg/kg
LD50 (Rat): 270 mg/kg
Acute inhalation toxicity : LC50 (Rat): 1.75 mg/l
Acute dermal toxicity : LD50 (Rat): 355 mg/kg
LD50 (Rabbit): 6,000 mg/kg

Sodium hydroxide:
Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

Phenol:
Acute oral toxicity : LD50 (Rat): 650 mg/kg
Method: OECD Test Guideline 401
Acute toxicity estimate (Humans): 140 - 290 mg/kg
Method: Expert judgement
Acute inhalation toxicity : LC0 (Rat): 0.9 mg/l
Exposure time: 8 h
Test atmosphere: dust/mist
Dichlofenthion Formulation

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<tr>
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<td>14.04.2017</td>
</tr>
</tbody>
</table>

Assessment: Corrosive to the respiratory tract.

Acute toxicity estimate (Humans): > 0.9 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgement

Acute dermal toxicity: LD50 (Rabbit): 660 mg/kg
Method: OECD Test Guideline 402

Acute toxicity estimate ( Humans): 300 mg/kg
Method: Expert judgement

**m-Cresol:**
Acute oral toxicity: LD50 (Rat): 121 mg/kg
Remarks: Based on data from similar materials

Acute inhalation toxicity: Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity: LD50 (Rabbit): 301 mg/kg
Remarks: Based on data from similar materials

**p-Cresol:**
Acute oral toxicity: LD50 (Rat): 172 - 250 mg/kg

Acute inhalation toxicity: Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity: LD50 (Rabbit): 213 - 426 mg/kg

**Skin corrosion/irritation**
Causes severe burns.

**Components:**

**Tar, wood:**
Method: OECD Test Guideline 439
Result: Skin irritation

**Rosin:**
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

**Tar, coal:**
Species: Rabbit
Result: Mild skin irritation

**Xylene:**
Species: Rabbit
Result: Skin irritation
Dichlofenthion Formulation

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichlofenthion (ISO)</td>
<td>:Mild skin irritation</td>
<td>:Based on data from similar materials</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>:Corrosive after 3 minutes or less of exposure</td>
<td></td>
</tr>
<tr>
<td>Phenol</td>
<td>:Corrosive after 3 minutes to 1 hour of exposure</td>
<td></td>
</tr>
<tr>
<td>m-Cresol</td>
<td>:Corrosive after 3 minutes to 1 hour of exposure</td>
<td></td>
</tr>
<tr>
<td>p-Cresol</td>
<td>:Corrosive after 3 minutes to 1 hour of exposure</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes serious eye damage.</td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tar, wood</td>
<td>:Irritation to eyes, reversing within 7 days</td>
<td></td>
</tr>
<tr>
<td>Rosin</td>
<td>:Rabbit</td>
<td>:OECD Test Guideline 405</td>
</tr>
<tr>
<td>Tar, coal</td>
<td>:Human</td>
<td>:Irreversible effects on the eye</td>
</tr>
<tr>
<td>Xylene</td>
<td>:Rabbit</td>
<td>:Irritation to eyes, reversing within 21 days</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>:Irreversible effects on the eye</td>
<td>:Based on skin corrosivity.</td>
</tr>
</tbody>
</table>

**Components:**

**Tar, wood:**
- Result: Irritation to eyes, reversing within 7 days

**Rosin:**
- Species: Rabbit
- Method: OECD Test Guideline 405
- Result: No eye irritation

**Tar, coal:**
- Species: Human
- Result: Irreversible effects on the eye

**Xylene:**
- Species: Rabbit
- Result: Irritation to eyes, reversing within 21 days

**Sodium hydroxide:**
- Result: Irreversible effects on the eye
- Remarks: Based on skin corrosivity.
## Dichlofenthion Formulation

### Species and Result

- **m-Cresol:**
  - **Species:** Rabbit
  - **Result:** Irreversible effects on the eye

- **p-Cresol:**
  - **Species:** Rabbit
  - **Result:** Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified based on available information.

### Components:

#### Tar, wood:

- **Test Type:** Local lymph node assay (LLNA)
- **Exposure routes:** Skin contact
- **Species:** Mouse
- **Method:** OECD Test Guideline 429
- **Result:** positive
- **Assessment:** Probability or evidence of low to moderate skin sensitisation rate in humans

#### Rosin:

- **Assessment:** Probability or evidence of skin sensitisation in humans
- **Remarks:** Based on harmonised classification in EU regulation 1272/2008, Annex VI

#### Tar, coal:

- **Test Type:** Local lymph node assay (LLNA)
- **Exposure routes:** Skin contact
- **Species:** Mouse
- **Method:** OECD Test Guideline 429
- **Result:** positive
- **Remarks:** Based on data from similar materials
- **Assessment:** Probability or evidence of skin sensitisation in humans

#### Xylene:

- **Test Type:** Local lymph node assay (LLNA)
- **Exposure routes:** Skin contact
Dichlofenthion Formulation

Species: Mouse
Result: negative

Dichlofenthion (ISO):
Exposure routes: Dermal
Assessment: Does not cause skin sensitisation.
Result: Weak sensitizer
Remarks: Based on data from similar materials

Sodium hydroxide:
Test Type: Human repeat insult patch test (HRIPT)
Exposure routes: Skin contact
Result: negative

Phenol:
Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

p-Cresol:
Test Type: Draize Test
Exposure routes: Skin contact
Species: Guinea pig
Result: negative

Germ cell mutagenicity
Suspected of causing genetic defects.

Components:

Tar, wood:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Rosin:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Tar, coal:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: positive
Remarks: Based on data from similar materials

Germ cell mutagenicity- As-: Positive result(s) from in vivo non-mammalian somatic cell
Genotoxicity tests, supported by positive results from in vitro mutagenicity assays. Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

### Ethylbenzene:

**Genotoxicity in vitro**
- Test Type: Bacterial reverse mutation assay (AMES)
  - Result: negative

- Test Type: In vitro mammalian cell gene mutation test
  - Method: OECD Test Guideline 476
  - Result: negative

- Test Type: Chromosome aberration test in vitro
  - Result: negative

**Genotoxicity in vivo**
- Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo
  - Species: Mouse
  - Application Route: Inhalation
  - Method: OECD Test Guideline 486
  - Result: negative

### Xylene:

**Genotoxicity in vitro**
- Test Type: Bacterial reverse mutation assay (AMES)
  - Result: negative

- Test Type: Chromosome aberration test in vitro
  - Result: negative

- Test Type: In vitro mammalian cell gene mutation test
  - Result: negative

- Test Type: In vitro sister chromatid exchange assay in mammalian cells
  - Result: negative

**Genotoxicity in vivo**
- Test Type: Rodent dominant lethal test (germ cell) (in vivo)
  - Species: Mouse
  - Application Route: Skin contact
  - Result: negative

### Phenol:

**Genotoxicity in vitro**
- Test Type: Chromosome aberration test in vitro
  - Method: OECD Test Guideline 473
  - Result: positive

**Genotoxicity in vivo**
- Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
  - Species: Mouse
  - Application Route: Intraperitoneal injection
  - Method: OECD Test Guideline 474
Dichlofenthion Formulation

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<th>SDS Number:</th>
<th>Date of last issue:</th>
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</tr>
</tbody>
</table>

Result: positive  
Remarks: Annex VI From 1272/2008

Germ cell mutagenicity- Assessment: Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

**m-Cresol:**

Genotoxicity in vitro: Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: positive

Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Genotoxicity in vivo: Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Species: Mouse  
Application Route: Ingestion  
Method: OECD Test Guideline 475  
Result: negative

**p-Cresol:**

Genotoxicity in vitro: Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: positive

Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative

Genotoxicity in vivo: Test Type: Rodent dominant lethal test (germ cell) (in vivo)  
Species: Mouse  
Application Route: Ingestion  
Method: OECD Test Guideline 478  
Result: negative

**Carcinogenicity**

May cause cancer if swallowed.

**Components:**

**Tar, coal:**

Species: Mouse  
Application Route: Ingestion  
Exposure time: 2 Years  
Result: positive

Carcinogenicity - Assessment: Positive evidence from human epidemiological studies (oral)  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI
Ethylbenzene:
Species: Rat  
Application Route: inhalation (vapour)  
Exposure time: 104 weeks  
Result: positive  
Remarks: The mechanism or mode of action may not be relevant in humans.

Xylene:
Species: Rat  
Application Route: Ingestion  
Exposure time: 103 weeks  
Result: negative

Phenol:
Species: Mouse  
Application Route: Ingestion  
Exposure time: 103 weeks  
Method: OECD Test Guideline 451  
Result: negative

m-Cresol:
Species: Mouse, males  
Application Route: Ingestion  
Exposure time: 105 weeks  
Result: equivocal  
Remarks: Based on data from similar materials

Species: Mouse, female  
Application Route: Ingestion  
Exposure time: 106 - 107 weeks  
Result: positive  
Remarks: Based on data from similar materials

Carcinogenicity - Assessment: Weight of evidence does not support classification as a carcinogen

p-Cresol:
Species: Mouse  
Application Route: Ingestion  
Exposure time: 106 - 107 weeks  
Result: negative  
Remarks: Based on data from similar materials

Reproductive toxicity
Suspected of damaging the unborn child.

Components:
Rosin:
Effects on fertility: Test Type: Reproduction/Developmental toxicity screening test  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 421  
Result: negative

Effects on foetal development: Test Type: Reproduction/Developmental toxicity screening test  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 421  
Result: negative

**Ethylbenzene:**

Effects on fertility: Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapour)  
Method: OECD Test Guideline 416  
Result: negative

Effects on foetal development: Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Inhalation  
Method: OECD Test Guideline 414  
Result: negative

**Xylene:**

Effects on fertility: Test Type: One-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapour)  
Result: negative

Effects on foetal development: Test Type: Embryo-foetal development  
Species: Rat  
Application Route: inhalation (vapour)  
Result: negative

**Dichlofenthion (ISO):**

Effects on foetal development: Test Type: Development  
Species: Mouse  
Application Route: Intraperitoneal  
Developmental Toxicity: LOAEL: 80 mg/kg body weight  
Result: Reduced foetal weight, Embryotoxic effects.  
Remarks: Based on data from similar materials

Test Type: Development  
Species: Rat  
Application Route: Intraperitoneal  
Developmental Toxicity: LOAEL: 10 mg/kg body weight  
Result: Reduced foetal weight, Embryotoxic effects, No teratogenic effects
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Dichlofenthion Formulation

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Remarks: Based on data from similar materials

Reproductive toxicity - Assessment:
Suspected of damaging the unborn child.

Phenol:
Effects on fertility:
- Test Type: Two-generation reproduction toxicity study
  - Species: Rat
  - Application Route: Ingestion
  - Method: OECD Test Guideline 416
  - Result: negative

Effects on foetal development:
- Test Type: Embryo-foetal development
  - Species: Mouse
  - Application Route: Ingestion
  - Method: OECD Test Guideline 414
  - Result: negative

m-Cresol:
Effects on fertility:
- Test Type: Two-generation reproduction toxicity study
  - Species: Rat
  - Application Route: Ingestion
  - Result: negative

Effects on foetal development:
- Test Type: Prenatal development toxicity study (teratogenicity)
  - Species: Rat
  - Application Route: Ingestion
  - Result: negative

p-Cresol:
Effects on fertility:
- Test Type: Two-generation reproduction toxicity study
  - Species: Rat
  - Application Route: Ingestion
  - Result: negative

Effects on foetal development:
- Test Type: Embryo-foetal development
  - Species: Rat
  - Application Route: Ingestion
  - Result: negative

STOT - single exposure
May cause respiratory irritation.
Causes damage to organs.
Corrosive to the respiratory tract.

Components:

Tar, coal:
- Exposure routes: Ingestion
- Target Organs: Nervous system
- Assessment: Shown to produce significant health effects in animals at concentrations of 300 mg/kg bw or less.
Dichlofenthion Formulation

Xylene:
Assessment: May cause respiratory irritation.

STOT - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Components:
Tar, coal:
Target Organs: Respiratory Tract
Assessment: Shown to produce significant health effects in animals at concentrations of >0.02 to 0.2 mg/l/6h/d.

Exposure routes: inhalation (dust/mist/fume)
Target Organs: Respiratory Tract
Assessment: Shown to produce significant health effects in animals at concentrations of >0.02 to 0.2 mg/l/6h/d.

Ethylbenzene:
Exposure routes: inhalation (vapour)
Target Organs: Auditory system
Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.

Xylene:
Exposure routes: inhalation (vapour)
Target Organs: Auditory system
Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.

Dichlofenthion (ISO):
Target Organs: Nervous system
Assessment: Causes damage to organs through prolonged or repeated exposure.
Remarks: Based on human experience.

Phenol:
Target Organs: Central nervous system, Kidney, Liver, Skin
Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:
Ethylbenzene:
Species: Rat
LOAEL: 0.868 mg/l
Application Route: inhalation (vapour)
**Dichlofenthion Formulation**

<table>
<thead>
<tr>
<th>Exposure time: 13 Weeks</th>
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<tbody>
<tr>
<td>Species: Rat</td>
</tr>
<tr>
<td>NOAEL: 75 mg/kg</td>
</tr>
<tr>
<td>LOAEL: 250 mg/kg</td>
</tr>
<tr>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td>Method: OECD Test Guideline 408</td>
</tr>
</tbody>
</table>

**Xylene:**

<table>
<thead>
<tr>
<th>Species: Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAEL: &gt; 0.2 - 1 mg/l</td>
</tr>
<tr>
<td>Application Route: Inhalation (vapour)</td>
</tr>
<tr>
<td>Exposure time: 13 Weeks</td>
</tr>
<tr>
<td>Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

**Dichlofenthion (ISO):**

<table>
<thead>
<tr>
<th>Species: Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL: 0.75 mg/kg</td>
</tr>
<tr>
<td>Application Route: Oral</td>
</tr>
<tr>
<td>Exposure time: 90 d</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species: Dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL: 0.75 mg/kg</td>
</tr>
<tr>
<td>Application Route: Oral</td>
</tr>
<tr>
<td>Exposure time: 90 d</td>
</tr>
</tbody>
</table>

**Phenol:**

<table>
<thead>
<tr>
<th>Species: Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAEL: 300 mg/kg</td>
</tr>
<tr>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td>Exposure time: 90 Days</td>
</tr>
<tr>
<td>Method: OECD Test Guideline 408</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species: Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL: &gt;= 0.1 mg/l</td>
</tr>
<tr>
<td>Application Route: Inhalation (vapour)</td>
</tr>
<tr>
<td>Exposure time: 74 Days</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species: Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAEL: 260 mg/kg</td>
</tr>
<tr>
<td>Application Route: Skin contact</td>
</tr>
<tr>
<td>Exposure time: 18 Days</td>
</tr>
</tbody>
</table>

**m-Cresol:**

<table>
<thead>
<tr>
<th>Species: Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL: 150 mg/kg</td>
</tr>
</tbody>
</table>
Dichlofenthion Formulation

Application Route: Ingestion
Exposure time: 13 Weeks
Method: OECD Test Guideline 408

p-Cresol:
Species: Rat
NOAEL: 50 mg/kg
LOAEL: 175 mg/kg
Application Route: Ingestion
Exposure time: 90 Days
Method: OECD Test Guideline 408

Aspiration toxicity
May be fatal if swallowed and enters airways.

Product:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Components:

Ethylbenzene:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Xylene:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Experience with human exposure

Components:

Dichlofenthion (ISO):
Skin contact: Symptoms: irritating, central nervous system effects, sweating.
Remarks: Can be absorbed through skin.
May cause sensitisation by skin contact.
Eye contact: Symptoms: constriction of pupils, central nervous system effects.
Ingestion: Symptoms: Nausea, Diarrhoea, Vomiting, sweating, Lachrymation, constriction of pupils, Central nervous system depression, Gastrointestinal disturbance, bronchospasm, central nervous system effects, Oedema

SECTION 12: Ecological information

12.1 Toxicity

Components:

Tar, wood:
### Dichlofenthion Formulation

**Toxicity to daphnia and other aquatic invertebrates**
- **EC50** (Daphnia magna (Water flea)): 28 mg/l
  - Exposure time: 48 h
  - Method: OECD Test Guideline 202

**Toxicity to algae/aquatic plants**
- **EC50** (Desmodesmus subspicatus (green algae)): 17 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201

  **EC10** (Desmodesmus subspicatus (green algae)): 14 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201

### Rosin:

**Toxicity to fish**
- **LL50** (Danio rerio (zebra fish)): > 1 - < 10 mg/l
  - Exposure time: 96 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates**
- **EL50** (Daphnia magna (Water flea)): 911 mg/l
  - Exposure time: 48 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 202

**Toxicity to algae/aquatic plants**
- **NOELR** (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
  - Exposure time: 72 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 201

**Toxicity to microorganisms**
- **EC50**: > 10,000 mg/l
  - Exposure time: 3 h
  - Method: OECD Test Guideline 209

### Tar, coal:

**Toxicity to fish**
- **LL50** (Danio rerio (zebra fish)): > 250 mg/l
  - Exposure time: 96 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials

**Toxicity to daphnia and other aquatic invertebrates**
- **EL50** (Daphnia magna (Water flea)): 2.8 mg/l
  - Exposure time: 48 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 202
  - Remarks: Based on data from similar materials

**Toxicity to algae/aquatic plants**
- **EL50** (Desmodesmus subspicatus (green algae)): 36 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201
  - Remarks: Based on data from similar materials

  **NOELR** (Desmodesmus subspicatus (green algae)): 5 mg/l
  - Exposure time: 72 h
**Ethylbenzene:**

**Toxicity to fish**
- LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): 1.8 - 2.4 mg/l
  - Exposure time: 48 h

**Toxicity to algae/aquatic plants**
- EC50 (Pseudokirchneriella subcapitata (green algae)): 3.6 mg/l
  - Exposure time: 96 h
- NOEC (Pseudokirchneriella subcapitata (green algae)): 3.4 mg/l
  - Exposure time: 96 h

**Toxicity to microorganisms**
- EC50 (Nitrosomonas sp.): 96 mg/l
  - Exposure time: 24 h

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
- NOEC: 0.96 mg/l
  - Exposure time: 7 d
  - Species: Ceriodaphnia dubia (water flea)

**Xylene:**

**Toxicity to fish**
- LC50 (Oncorhynchus mykiss (rainbow trout)): 13.5 mg/l
  - Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l
  - Exposure time: 24 h
  - Method: OECD Test Guideline 202
  - Remarks: Based on data from similar materials

**Toxicity to algae/aquatic plants**
- EC50 (Skeletonema costatum (marine diatom)): 10 mg/l
  - Exposure time: 72 h

**Toxicity to microorganisms**
- NOEC: > 100 mg/l
  - Exposure time: 3 h
  - Method: OECD Test Guideline 209
  - Remarks: Based on data from similar materials

**Toxicity to fish (Chronic toxicity)**
- NOEC: > 0.1 - < 1 mg/l
  - Exposure time: 35 d
  - Species: Danio rerio (zebra fish)
  - Method: OECD Test Guideline 210
  - Remarks: Based on data from similar materials

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
- EL10: > 1 - 10 mg/l
  - Exposure time: 21 d
  - Species: Daphnia magna (Water flea)
  - Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

Dichlofenthion (ISO):
Toxicity to fish: LC50 (No species specified): 0.64 mg/l
   Exposure time: 96 h
   Method: OECD Test Guideline 203

   LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.23 mg/l
   Exposure time: 96 h
   Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0.0011 mg/l
   Exposure time: 48 h
   Method: OECD Test Guideline 202

M-Factor (Acute aquatic toxicity): 100

M-Factor (Chronic aquatic toxicity): 100

Phenol:
Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 24.9 mg/l
   Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Ceriodaphnia dubia (water flea)): 3.1 mg/l
   Exposure time: 48 h

Toxicity to algae/aquatic plants: EC50 (Selenastrum capricornutum (green algae)): 61.1 mg/l
   Exposure time: 96 h

Toxicity to microorganisms: IC50 (Nitrosomonas sp.): 21 mg/l
   Exposure time: 24 h

Toxicity to fish (Chronic toxicity): NOEC: 0.077 mg/l
   Exposure time: 60 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 10 mg/l
   Exposure time: 16 d
   Species: Daphnia magna (Water flea)

m-Cresol:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 8.6 mg/l
   Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia pulex (Water flea)): > 99.5 mg/l
   Exposure time: 48 h

Toxicity to fish (Chronic toxicity): NOEC: 1.35 mg/l
   Exposure time: 32 d
   Species: Pimephales promelas (fathead minnow)
   Remarks: Based on data from similar materials
<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)</th>
<th>Toxicity to fish (Chronic toxicity)</th>
<th>Toxicity to algae/aquatic plants</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Cresol</td>
<td>NOEC: 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Remarks: Based on data from similar materials</td>
<td>LC50 (Oncorhynchus mykiss (rainbow trout)): 7.4 mg/l Exposure time: 96 h</td>
<td>EC50 (Daphnia magna (Water flea)): 7.7 mg/l Exposure time: 48 h Method: DIN 38412</td>
<td>IC50 (Nitrosomonas sp.): 260 mg/l Exposure time: 24 h</td>
<td>NOEC: 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)</td>
</tr>
</tbody>
</table>
Dichlofenthion Formulation

**Xylene:**
Biodegradability: Result: Readily biodegradable.
Biodegradation: > 70%
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

**Phenol:**
Biodegradability: Result: Readily biodegradable.
Biodegradation: 62%
Exposure time: 10 d
Method: OECD Test Guideline 301C

**m-Cresol:**
Biodegradability: Result: Readily biodegradable.
Biodegradation: 90%
Exposure time: 28 d
Method: OECD Test Guideline 301D

**p-Cresol:**
Biodegradability: Result: Readily biodegradable.
Biodegradation: 100%
Exposure time: 8 d

12.3 Bioaccumulative potential

**Components:**

**Tar, wood:**
Partition coefficient: n-octanol/water: log Pow: 0.2 - 2.02

**Rosin:**
Bioaccumulation: Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): < 100

**Ethylbenzene:**
Partition coefficient: n-octanol/water: log Pow: 3.6

**Xylene:**
Partition coefficient: n-octanol/water: log Pow: 3.16
Remarks: Calculation

Dichlofenthion (ISO):
Dichlofenthion Formulation

Partition coefficient: n-octanol/water : log Pow: 5.14

**Phenol:**
Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 17.5
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : log Pow: 1.47

**m-Cresol:**
Bioaccumulation : Species: Leuciscus idus (Golden orfe)
Bioconcentration factor (BCF): 17 - 20

Partition coefficient: n-octanol/water : log Pow: 1.96

**p-Cresol:**
Bioaccumulation : Species: Leuciscus idus (Golden orfe)
Bioconcentration factor (BCF): 17 - 20
Remarks: Based on data from similar materials

Partition coefficient: n-octanol/water : log Pow: 1.94

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
Not relevant

**12.6 Other adverse effects**
No data available

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**
**Product** : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**Contaminated packaging** : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.

**SECTION 14: Transport information**

**14.1 UN number**
**SAFETY DATA SHEET**
according to Regulation (EC) No. 1907/2006

**Dichlofenthion Formulation**

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date</th>
<th>SDS Number</th>
<th>Date of last issue</th>
<th>Date of first issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>23.03.2020</td>
<td>1560320-00007</td>
<td>13.09.2019</td>
<td>14.04.2017</td>
</tr>
</tbody>
</table>

**UN proper shipping name**

| ADN      | UN 2920          |
| ADR      | UN 2920          |
| RID      | UN 2920          |
| IMDG     | UN 2920          |
| IATA     | UN 2920          |

**14.2 UN proper shipping name**

| ADN      | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene) |
| ADR      | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene) |
| RID      | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene) |
| IMDG     | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene, Dichlofenthion (ISO)) |
| IATA     | Corrosive liquid, flammable, n.o.s. (Sodium hydroxide, Ethylbenzene) |

**14.3 Transport hazard class(es)**

<table>
<thead>
<tr>
<th>ADN</th>
<th>ADR</th>
<th>RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**14.4 Packing group**

| ADN      | Packing group: II  |
| Classification Code: CF1  |
| Hazard Identification Number: 83  |
| Labels: 8 (3)  |

| ADR      | Packing group: II  |
| Classification Code: CF1  |
| Hazard Identification Number: 83  |
| Labels: 8 (3)  |

| RID      | Packing group: II  |
| Classification Code: CF1  |
| Hazard Identification Number: 83  |
| Labels: 8 (3)  |

| IMDG     | Packing group: II  |
| Labels: 8 (3)  |
Dichlofenthion Formulation

Version 3.3  Revision Date: 23.03.2020  SDS Number: 1560320-00007  Date of last issue: 13.09.2019  Date of first issue: 14.04.2017

EmS Code : F-E, S-C

IATA (Cargo)
- Packing instruction (cargo aircraft) : 855
- Packing instruction (LQ) : Y840
- Packing group : II
- Labels : Corrosive, Flammable Liquids

IATA (Passenger)
- Packing instruction (passenger aircraft) : 851
- Packing instruction (LQ) : Y840
- Packing group : II
- Labels : Corrosive, Flammable Liquids

14.5 Environmental hazards

ADN
- Environmentally hazardous : yes

ADR
- Environmentally hazardous : yes

RID
- Environmentally hazardous : yes

IMDG
- Marine pollutant : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
- Number on list 3
- Tar, coal (Number on list 28)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parlia-
ment and the Council concerning the export and import of dangerous chemicals

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Quantity 1</th>
<th>Quantity 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3</td>
<td>STOT SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE</td>
<td>50 t</td>
<td>200 t</td>
</tr>
<tr>
<td>P5c</td>
<td>FLAMMABLE LIQUIDS</td>
<td>5,000 t</td>
<td>50,000 t</td>
</tr>
<tr>
<td>E1</td>
<td>ENVIRONMENTAL HAZARDS</td>
<td>100 t</td>
<td>200 t</td>
</tr>
</tbody>
</table>

Other regulations:
Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:
AICS: not determined
DSL: not determined
IECSC: not determined

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information: Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements
H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H290: May be corrosive to metals.
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H311: Toxic in contact with skin.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H341: Suspected of causing genetic defects.
Dichlofenthion Formulation

H350 : May cause cancer if swallowed.
H361d: Suspected of damaging the unborn child.
H370 : Causes damage to organs.
H372 : Causes damage to organs through prolonged or repeated exposure.
H373 : May cause damage to organs through prolonged or repeated exposure.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Asp. Tox. : Aspiration hazard
Carc. : Carcinogenicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Met. Corr. : Corrosive to metals
Muta. : Germ cell mutagenicity
Repr. : Reproductive toxicity
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation
STOT RE : Specific target organ toxicity - repeated exposure
STOT SE : Specific target organ toxicity - single exposure
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT : UK. Biological monitoring guidance values
2000/39/EC / TWA : Limit Value - eight hours
2000/39/EC / STEL : Short term exposure limit
2009/161/EU / TWA : Limit Value - eight hours
2009/161/EU / STEL : Short term exposure limit
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System;
GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

| Flam. Liq. 3 | H226 | Based on product data or assessment |
| Acute Tox. 4 | H302 | Calculation method |
| Skin Corr. 1B | H314 | Calculation method |
| Eye Dam. 1 | H318 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| Muta. 2 | H341 | Calculation method |
| Carc. 1A | H350 | Calculation method |
| Repr. 2 | H361d | Calculation method |
| STOT SE 1 | H370 | Calculation method |
| STOT SE 3 | H335 | Calculation method |
| STOT RE 2 | H373 | Calculation method |
| Asp. Tox. 1 | H304 | Based on product data or assessment |
| Aquatic Acute 1 | H400 | Calculation method |
| Aquatic Chronic 1 | H410 | Calculation method |

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS mate-
Material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

GB / EN