SAFETY DATA SHEET

Dichlofenthion Formulation

Section 1: Identification

Product name: Dichlofenthion Formulation

Manufacturer or supplier's details
Company: MSD
Address: 33 Whakatiki Street - Private Bag 908
Upper Hutt - New Zealand
Telephone: +1-908-740-4000
Emergency telephone number: +1-908-423-6000
E-mail address: EHSDATASTEWARD@msd.com

Recommended use of the chemical and restrictions on use
Recommended use: Veterinary product

Section 2: Hazard identification

GHS Classification
- Flammable liquids: Category 3
- Acute toxicity (Oral): Category 4
- Skin corrosion/irritation: Sub-category 1B
- Serious eye damage/eye irritation: Category 1
- Skin sensitisation: Category 1
- Germ cell mutagenicity: Category 2
- Carcinogenicity (Oral): Category 1A
- Reproductive toxicity: Category 2
- Specific target organ toxicity - single exposure: Category 1 (Nervous system)
- Aspiration hazard: Category 1
Hazard pictograms:

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 (Nervous system).
- H373 May cause damage to organs (Nervous system, Respiratory Tract) through prolonged or repeated exposure.

Precautionary statements:

Prevention:
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
- P242 Use non-sparking tools.
- P243 Take action to prevent static discharges.
- P260 Do not breathe vapours.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
- P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/ doctor.
- P303 + P361 + P353 + P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER/ doctor.
- P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
- 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.

SECTION 4: 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.

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 and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

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.

Most important symptoms and effects, both acute and delayed

- 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.

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).

Notes to physician

Treat symptomatically and supportively.

Section 5: Fire-fighting measures

Suitable extinguishing media

- Water spray
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- Dry chemical

Unsuitable extinguishing media

- High volume water jet

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)

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.

Special protective equipment for firefighters

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

Hazchem Code

- 3W

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Remove all sources of ignition.
- Use personal protective equipment.
Emergency procedures

Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions:
- Avoid release to the environment.
- 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.

Methods and materials for containment and 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 containment 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 certain local or national requirements.

Section 7: Handling and storage

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

Local/Total ventilation:
- If sufficient ventilation is unavailable, use with local exhaust ventilation.
- Use explosion-proof electrical, ventilating and lighting equipment.

Advice on safe handling:
- Do not get on skin or clothing.
- Do not breathe vapours.
- Do not swallow.
- Do not get in eyes.
- Wash skin thoroughly after handling.
- 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Take precautionary measures against static discharges.
- Do not eat, drink or smoke when using this product.
- 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.
Contaminated work clothing should not be allowed out of the workplace.
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.

Conditions for safe storage:
- 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.

Materials to avoid:
- Do not store with the following product types:
  - Self-reactive substances and mixtures
  - Organic peroxides
  - Oxidizing agents
  - Flammable gases
  - Pyrophoric liquids
  - Pyrophoric solids
  - Self-heating substances and mixtures
  - Poisonous gases
  - Explosives

Section 8: Exposure controls/personal protection

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>WES-TWA</td>
<td>100 ppm 434 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WES-STEEL</td>
<td>125 ppm 543 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>20 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>WES-TWA</td>
<td>50 ppm 217 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>150 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Dichlofenthion (ISO)</td>
<td>97-17-6</td>
<td>TWA</td>
<td>20 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>WES-Ceiling</td>
<td>2 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>2 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>WES-TWA</td>
<td>1 ppm 3.8 mg/m³</td>
<td>NZ OEL</td>
</tr>
</tbody>
</table>

Further information:
- Skin: Wipe limit 200 µg/100 cm² Internal
- Sodium hydroxide: WES-Ceiling 2 mg/m³ NZ OEL
- C 2 mg/m³ ACGIH
- Phenol: WES-TWA 1 ppm 3.8 mg/m³ NZ OEL
- WES-STEEL 2 ppm NZ OEL
Further information: Skin absorption

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Cresol</td>
<td>108-39-4</td>
<td>WES-TWA</td>
<td>5 ppm</td>
<td>TWA (Inhalable fraction and vapor)</td>
<td>20 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-Cresol</td>
<td>106-44-5</td>
<td>WES-TWA</td>
<td>5 ppm</td>
<td>TWA (Inhalable fraction and vapor)</td>
<td>20 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>Total phenol</td>
<td>Urine</td>
<td>End of shift</td>
<td>100 mg/l</td>
<td>NZ BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phenol</td>
<td>Urine</td>
<td>End of shift</td>
<td>250 mg/g Creatinine</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>Methylhippuric acid</td>
<td>Urine</td>
<td>End of shift</td>
<td>1.5 g/l</td>
<td>NZ BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Methylhippuric acids</td>
<td>Urine</td>
<td>End of shift</td>
<td>1.5 g/g creatinine</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>Sum of mandelic acid and phenylglyoxylic acids</td>
<td>Urine</td>
<td>End of exposure or end of shift</td>
<td>0.25 g/g creatinine</td>
<td>NZ BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sum of mandelic acid and phenyl glyoxylic acid</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.15 g/g creatinine</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., dripless 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.
Use explosion-proof electrical, ventilating and lighting equipment.

Personal protective equipment

Respiratory protection: If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
Filter type: Combined particulates and organic vapour type
Hand protection: Chemical-resistant gloves
Material: Consider double gloving. Take note that the product is flammable, which may impact the selection of hand protection.
Remarks: Wear safety glasses with side shields or goggles.
Eye protection: Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

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.

Section 9: 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

Flammability (solid, gas) : Not applicable

Flammability (liquids) : 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.

Particle size : Not applicable

Section 10: Stability and reactivity

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

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

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.
Section 11: Toxicological information

Exposure routes: 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
<table>
<thead>
<tr>
<th>Compound</th>
<th>Acute oral toxicity</th>
<th>Acute inhalation toxicity</th>
<th>Acute dermal toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>LD50 (Rat): 3,523 mg/kg</td>
<td>LC50 (Rat): 27.571 mg/l</td>
<td>LD50 (Rabbit): &gt; 4,200 mg/kg</td>
</tr>
<tr>
<td>Dichlofenthion (ISO)</td>
<td>LD50 (Rat): 172 mg/kg</td>
<td>LC50 (Rat): 1.75 mg/l</td>
<td>LD50 (Rabbit): 6,000 mg/kg</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Assessment: Corrosive to the respiratory tract.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenol</td>
<td>LD50 (Rat): 650 mg/kg</td>
<td>LC0 (Rat): 0.9 mg/l</td>
<td>LD50 (Rabbit): 660 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Methods: OECD Test Guideline 401</td>
<td>Exposure time: 8 h, Test atmosphere: dust/mist</td>
<td>Methods: OECD Test Guideline 402</td>
</tr>
<tr>
<td></td>
<td>Acute toxicity estimate (Humans): 140 - 290 mg/kg</td>
<td>Assessment: Corrosive to the respiratory tract.</td>
<td>Acute toxicity estimate (Humans): 300 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Method: Expert judgement</td>
<td></td>
<td>Method: Expert judgement</td>
</tr>
<tr>
<td>m-Cresol</td>
<td>LD50 (Rat): 121 mg/kg</td>
<td>Assessment: Corrosive to the respiratory tract.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remarks: Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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:
Species: reconstructed human epidermis (RhE)
Method: OECD Test Guideline 439
Species: reconstructed human epidermis (RhE)
Method: OECD Test Guideline 431
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 (ISO):
Result: Mild skin irritation
Remarks: Based on data from similar materials

Sodium hydroxide:
Result: Corrosive after 3 minutes or less of exposure

Phenol:
Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure
SAFETY DATA SHEET

Dichlofenthion Formulation

Version: 4.0  Revision Date: 27.08.2021  SDS Number: 1552596-00010  Date of last issue: 09.04.2021

Date of first issue: 14.04.2017

m-Cresol:
Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure

p-Cresol:
Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure

**Serious eye damage/eye irritation**
Causes serious eye damage.

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tar, wood</td>
<td>Rabbit</td>
<td>Irritation to eyes, reversing within 7 days</td>
</tr>
<tr>
<td>Rosin</td>
<td>Rabbit</td>
<td>No eye irritation</td>
</tr>
<tr>
<td></td>
<td>Method</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></td>
<td>Irreversible effects on the eye</td>
</tr>
<tr>
<td>Phenol</td>
<td>Rabbit</td>
<td>Irreversible effects on the eye</td>
</tr>
<tr>
<td>m-Cresol</td>
<td>Rabbit</td>
<td>Irreversible effects on the eye</td>
</tr>
<tr>
<td>p-Cresol</td>
<td>Rabbit</td>
<td>Irreversible effects on the eye</td>
</tr>
</tbody>
</table>

Remarks: Based on skin corrosivity.
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
- 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

Chronic toxicity

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 - Assessment:
Positive result(s) from in vivo non-mammalian somatic cell mutagenicity 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
  - **Test Type:** Bacterial reverse mutation assay (AMES)
    - **Method:** OECD Test Guideline 471
    - **Result:** negative

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

Method: OECD Test Guideline 416
Result: negative

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

Xylene:
Effects on fertility:
Species: Rat
Application Route: inhalation (vapour)
Result: negative

Effects on foetal development:
Species: Rat
Application Route: inhalation (vapour)
Result: negative

Dichlofenthion (ISO):
Effects on foetal 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
Remarks: Based on data from similar materials

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

Phenol:
Effects on fertility:
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

Effects on 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

STOT - single exposure
May cause respiratory irritation.
Causes damage to organs (Nervous system).
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.

**Xylene:**

Assessment: May cause respiratory irritation.

STOT - repeated exposure
May cause damage to organs (Nervous system, Respiratory Tract) 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)
- Exposure time: 13 Weeks

Species: Rat
- NOAEL: 75 mg/kg
- LOAEL: 250 mg/kg
- Application Route: Ingestion
- Method: OECD Test Guideline 408

Xylene:
- Species: Rat
- LOAEL: > 0.2 - 1 mg/l
- Application Route: inhalation (vapour)
- Exposure time: 13 Weeks
- Remarks: Based on data from similar materials

Species: Rat
- LOAEL: 150 mg/kg
- Application Route: Ingestion
- Exposure time: 90 Days
Dichlofenthion Formulation

Dichlofenthion (ISO):
Species : Rat
NOAEL : 0.75 mg/kg
Application Route : Oral
Exposure time : 90 d

Species : Dog
NOAEL : 0.75 mg/kg
Application Route : Oral
Exposure time : 90 d

Phenol:
Species : Rat
LOAEL : 300 mg/kg
Application Route : Ingestion
Exposure time : 90 Days
Method : OECD Test Guideline 408

Species : Rat
NOAEL : >= 0.1 mg/l
Application Route : inhalation (vapour)
Exposure time : 74 Days

Species : Rabbit
LOAEL : 260 mg/kg
Application Route : Skin contact
Exposure time : 18 Days

m-Cresol:
Species : Rat
NOAEL : 150 mg/kg
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 |
| 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

Ecotoxicity

Components:

Tar, wood:

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
### Dichlofenthion Formulation

<table>
<thead>
<tr>
<th>Method</th>
<th>OECD Test Guideline 202</th>
</tr>
</thead>
</table>

#### 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
- **EL50 (Desmodesmus subspicatus (green algae)):** 36 mg/l
  - Exposure time: 72 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 201
  - Remarks: Based on data from similar materials

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

#### Tar, coal:
- **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

#### Ethylbenzene:
- **LC50 (Onchorhynchus mykiss (rainbow trout)):** 4.2 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203
- **EC50 (Daphnia magna (Water flea)):** 1.8 - 2.4 mg/l
  - Exposure time: 48 h
- **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
  - Remarks: Based on data from similar materials
Toxicity to microorganisms: EC50 (Nitrosomonas sp.): 96 mg/l
Exposure time: 24 h

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 fish (Chronic toxicity): NOEC (Danio rerio (zebra fish)): > 0.1 - < 1 mg/l
Exposure time: 35 d
Method: OECD Test Guideline 210
Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): EL10 (Daphnia magna (Water flea)): > 1 - 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials
Toxicity to microorganisms: NOEC: > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
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

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

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

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

**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 (Pimephales promelas (fathead minnow)): 1.35 mg/l
- Exposure time: 32 d
  Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC (Daphnia magna (Water flea)): 1 mg/l
- Exposure time: 21 d
  Remarks: Based on data from similar materials

**p-Cresol:**

Toxicity to fish:
- LC50 (Oncorhynchus mykiss (rainbow trout)): 7.4 mg/l
- Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 7.7 mg/l
- Exposure time: 48 h
  Method: DIN 38412

Toxicity to algae/aquatic plants:
- EC50 (Desmodesmus subspicatus (green algae)): 7.8 mg/l
  Exposure time: 48 h
- EC10 (Desmodesmus subspicatus (green algae)): 2.3 mg/l
  Exposure time: 48 h

Toxicity to fish (Chronic toxicity):
- NOEC (Pimephales promelas (fathead minnow)): 1.35 mg/l
  Exposure time: 32 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC (Daphnia magna (Water flea)): 1 mg/l
  Exposure time: 21 d

Toxicity to microorganisms:
- IC50 (Nitrosomonas sp.): 260 mg/l
  Exposure time: 24 h

**Persistence and degradability**

**Components:**

**Tar, wood:**

Biodegradability: Result: Not readily biodegradable.
Rosin:
Biodegradability: Result: Readily biodegradable.
Biodegradation: 71 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Ethylbenzene:
Biodegradability: Result: Readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

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

Bioaccumulative potential

Components:
Tar, wood:
Partition coefficient: n-octanol/water: log Pow: 0.2 - 2.02
Rosin:
Bioaccumulation: Species: Onchorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): < 100
Partition coefficient: n-octanol/water

**Tar, coal:**
Partition coefficient: n-octanol/water
Remarks: No data available

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

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

**Dichlofenthion (ISO):**
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

**Mobility in soil**
No data available

**Other adverse effects**
No data available

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**Section 13: Disposal considerations**

**Disposal methods**
- Waste from residues: Dispose of in accordance with local regulations.
- 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

**International Regulations**

**UNRTDG**
- **UN number**: UN 2920
- **Proper shipping name**: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene)
- **Class**: 8
- **Subsidiary risk**: 3
- **Packing group**: II
- **Labels**: 8 (3)

**IATA-DGR**
- **UN/ID No.**: UN 2920
- **Proper shipping name**: Corrosive liquid, flammable, n.o.s. (Sodium hydroxide, Ethylbenzene)
- **Class**: 8
- **Subsidiary risk**: 3
- **Packing group**: II
- **Labels**: Corrosive, Flammable Liquids
- **Packing instruction (cargo aircraft)**: 855
- **Packing instruction (passenger aircraft)**: 851

**IMDG-Code**
- **UN number**: UN 2920
- **Proper shipping name**: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene, Dichlofenthion (ISO))
- **Class**: 8
- **Subsidiary risk**: 3
- **Packing group**: II
- **Labels**: 8 (3)
- **EmS Code**: F-E, S-C
- **Marine pollutant**: yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable for product as supplied.

**National Regulations**

**NZS 5433**
- **UN number**: UN 2920
- **Proper shipping name**: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene)
- **Class**: 8
- **Subsidiary risk**: 3
- **Packing group**: II
- **Labels**: 8 (3)
- **Hazchem Code**: 3W
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.

Section 15: Regulatory information

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

HSNO Approval Number
HSR100758 Veterinary Medicines Non dispersive Closed System Application Group Standard 2017

HSW Controls
Certified handler certificate not required.
Tracking hazardous substance not required.
Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

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

Section 16: Other information

Further information

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

Date format : dd.mm.yyyy

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NZ BEI : New Zealand. Biological Exposure Indices
NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
ACGIH / C : Ceiling limit
NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average
NZ OEL / WES- STEL : Workplace Exposure Standard - Short-Term Exposure Limit
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 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.