

according to the Hazardous Products Regulations

Dichlofenthion Formulation

| Version Revision Date: SDS Number: D 9.1 09/28/2024 1552609-00016 D | Pate of last issue: 09/30/2023 Pate of first issue: 04/14/2017 |
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SECTION 1. IDENTIFICATION

| Product name | : | Dichlofenthion Formulation |
|-------------------------------|---|----------------------------|
| Other means of identification | : | No data available |

Manufacturer or supplier's details

| Company name of supplier | : | Merck & Co., Inc |
|--------------------------|---|---------------------------------|
| Address | : | 126 E. Lincoln Avenue |
| | | Rahway, New Jersey U.S.A. 07065 |
| Telephone | : | 908-740-4000 |
| Emergency telephone | : | 1-908-423-6000 |
| E-mail address | : | EHSDATASTEWARD@merck.com |
| | | |

Recommended use of the chemical and restrictions on use

| Recommended use | : | Veterinary product |
|---------------------|---|--------------------|
| Restrictions on use | : | Not applicable |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

| Flammable liquids | : | Category 3 |
|---|---|--|
| Acute toxicity (Oral) | : | Category 4 |
| Skin corrosion | : | Category 1 |
| Serious eye damage | : | Category 1 |
| Skin sensitization | : | 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) |
| Specific target organ toxicity - single exposure | : | Category 3 |
| Specific target organ toxicity - repeated exposure | : | Category 1 (Nervous system) |
| Specific target organ toxicity - repeated exposure | : | Category 2 (Central nervous system, Kidney, Liver, Skin, Respiratory Tract, Auditory system) |
| Aspiration hazard | : | Category 1 |
| | | |

GHS label elements



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| Hazar | rd pictograms | | |
| Signa | I Word | : Danger | |
| Hazar | rd Statements | H226 Flammab H302 Harmful if H304 May be fa H314 Causes s H317 May caus H335 May caus H341 Suspecte H350 May caus H361d Suspect H370 Causes d H372 Causes d prolonged or re H373 May caus Kidney, Liver, S prolonged or re | le liquid and vapor. swallowed. ttal if swallowed and enters airways. evere skin burns and eye damage. e an allergic skin reaction. e respiratory irritation. d of causing genetic defects. e cancer if swallowed. ed of damaging the unborn child. amage to organs (Nervous system). amage to organs (Nervous system) through peated exposure. e damage to organs (Central nervous system, skin, Respiratory Tract, Auditory system) through peated exposure. |
| Preca | utionary Statements | Prevention: P201 Obtain sp P202 Do not ha and understood P210 Keep awa and other ignitic P260 Do not bro P264 Wash skir P270 Do not ea P271 Use only P272 Contamin the workplace. P280 Wear prot and face protec | ecial instructions before use. ndle until all safety precautions have been read ay from heat, hot surfaces, sparks, open flames on sources. No smoking. eathe vapors. In thoroughly after handling. t, drink or smoke when using this product. outdoors or in a well-ventilated area. ated work clothing should not be allowed out of rective gloves, protective clothing, eye protection tion. |
| | | Response: P $301 + P330 +$ Do NOT induce P $303 + P361 +$ immediately all Immediately cal P $304 + P340 +$ and keep comfor CENTER. P $305 + P351 +$ water for severa and easy to do. CENTER. P $308 + P311$ IF P $333 + P313$ If | P331 + P310 IF SWALLOWED: Rinse mouth. vomiting. Immediately call a POISON CENTER. P353 + P310 IF ON SKIN (or hair): Take off contaminated clothing. Rinse skin with water. I a POISON CENTER. P310 IF INHALED: Remove person to fresh air ortable for breathing. Immediately call a POISON P338 + P310 IF IN EYES: Rinse cautiously with al minutes. Remove contact lenses, if present Continue rinsing. Immediately call a POISON rexposed or concerned: Call a doctor. skin irritation or rash occurs: Get medical atten- |

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tion.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards

Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance / Mixture | : | Mixture |
|---------------------|---|---------|
|---------------------|---|---------|

Components

| Chemical name | Common Name/Synonym | CAS-No. | Concentration (% w/w) |
|----------------------|-------------------------|------------|-----------------------|
| Tar, wood | No data availa- ble | 91722-33-7 | >= 10 - < 30 * |
| Rosin | No data availa- ble | 8050-09-7 | >= 10 - < 30 * |
| Tar, coal | No data availa- ble | 8007-45-2 | >= 10 - < 30 * |
| Ethylbenzene | Benzene, ethyl- | 100-41-4 | >= 5 - < 10 * |
| Xylene | Benzene, dime- thyl- | 1330-20-7 | >= 5 - < 10 * |
| Dichlofenthion (ISO) | No data availa- ble | 97-17-6 | >= 1 - < 5 * |
| Sodium hydroxide | Caustic soda | 1310-73-2 | >= 2 - < 5 * |
| Phenol | Monohy- droxybenzene | 108-95-2 | >= 1 - < 3 * |
| m-Cresol | Phenol, 3- methyl- | 108-39-4 | >= 1 - < 5 * |
| p-Cresol | Phenol, 4- methyl- | 106-44-5 | >= 1 - < 5 * |

^{*} Actual concentration or concentration range is withheld as a trade secret

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 |

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| | | | | for at least 15 m and shoes. Get medical atte Wash clothing be Thoroughly clear | inutes while removing contaminated clothing ntion immediately. efore reuse. n shoes before reuse. |
| In | n case | of eye contact | : | In case of contact for at least 15 m If easy to do, ren Get medical atte | ct, immediately flush eyes with plenty of water inutes. nove contact lens, if worn. ntion immediately. |
| lf | swall | owed | : | If swallowed, DC If vomiting occur Call a physician Rinse mouth tho Never give anyth | NOT induce vomiting. s have person lean forward. or poison control center immediately. roughly with water. hing by mouth to an unconscious person. |
| M ar de | lost in nd eff elayed | nportant symptoms ects, both acute and d | : | Harmful if swallo May be fatal if sw May cause an al Causes serious May cause respi Suspected of ca May cause canc Suspected of da Causes damage causes damage exposure. Causes severe b Causes digestive | wed. vallowed and enters airways. lergic skin reaction. eye damage. ratory irritation. using genetic defects. er if swallowed. maging the unborn child. to organs. to organs through prolonged or repeated ourns. e tract burns. |
| P | rotect lotes t | ion of first-aiders o physician | : | First Aid respond and use the reco when the potenti Treat symptoma | ders should pay attention to self-protection, ommended personal protective equipment al for exposure exists (see section 8). tically 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 fire fighting | : | Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health. |
| Hazardous combustion prod- ucts | : | Carbon oxides Metal oxides Nitrogen oxides (NOx) |
| Specific extinguishing meth- ods | : | Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. |



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| | | | Use water spray to Remove undamag so. Evacuate area. | o cool unopened containers. Jed containers from fire area if it is safe to do | | |
| | Special for fire- | protective equipment fighters | In the event of fire, wear self-contained breathing apparatus Use personal protective equipment. | | | |
| SEC | TION 6 | ACCIDENTAL RELE | ASE | EMEASURES | | |
| | Persona tive equ gency p | al precautions, protec- upment and emer- procedures | : | Remove all source Use personal prot Follow safe handli protective equipm | es of ignition. ective equipment. ng advice (see section 7) and personal ent recommendations (see section 8). | |
| | Environ | mental precautions | : | Avoid release to the Prevent further lease Prevent spreading oil barriers). Retain and dispose Local authorities se cannot be contain | ne environment. akage or spillage if safe to do so. over a wide area (e.g., by containment or e of contaminated wash water. hould be advised if significant spillages ed. | |
| Methods and materials for containment and cleaning up | | : | Non-sparking tools Soak up with inert Suppress (knock of jet. For large spills, pr containment to ke can be pumped, s container. Clean up remainin absorbent. Local or national r disposal of this ma employed in the cl determine which r Sections 13 and 1 certain local or national r | s should be used. absorbent material. down) gases/vapors/mists with a water spray ovide diking or other appropriate ep material from spreading. If diked material tore recovered material in appropriate ag materials from spill with suitable egulations may apply to releases and aterial, as well as those materials and items leanup of releases. You will need to egulations are applicable. 5 of this SDS provide information regarding tional 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 equip- ment. |
| Advice on safe handling : | Do not get on skin or clothing. Do not breathe vapors. Do not swallow. |

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| | | Do not get in eyes. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safe practice, based on the results of the workplace exposure assessment Non-sparking tools should be used. Keep container tightly closed. Already sensitized individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease should consult their physician regarding working with respiratory irritants or sensitizers. Keep away from heat, hot surfaces, sparks, open flames ar other ignition sources. No smoking. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. | | | | |
| Cond | itions for safe storage | environment. : Keep in proper Store locked up | y labeled containers. | | | |
| | | Keep tightly clo Keep in a cool, Store in accord Keep away fror | sed. well-ventilated place. ance with the particular national regulations. n heat and sources of ignition | | | |
| Mater | ials to avoid | Do not store wi Strong oxidizing Self-reactive su Organic peroxid Flammable solid Pyrophoric liqui Pyrophoric solid Self-heating su Substances and flammable gase Explosives Gases Very acutely to: | th the following product types: g agents ubstances and mixtures des ds ds bstances and mixtures d mixtures which in contact with water emit es | | | |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|--------------|-----------|---|--|-----------|
| Rosin | 8050-09-7 | TWA (Inhalable particulate matter) | 0.001 mg/m ³ (total Resin acids) | ACGIH |
| Tar, coal | 8007-45-2 | TWA | 0.15 mg/m ³ | CA ON OEL |
| Ethylbenzene | 100-41-4 | STEL | 125 ppm 543 mg/m³ | CA AB OEL |
| | | TWA | 100 ppm 434 mg/m³ | CA AB OEL |



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| | | | Τ\Λ/Δ | 20 ppm | |
| | | | | 20 ppm | |
| | | | | 20 ppm | |
| Vulon | • | 1220.20.7 | | 20 ppm | |
| Xylen | e | 1330-20-7 | TWA | 434 mg/m ³ | |
| | | | STEL | 150 ppm 651 mg/m³ | CA AB OEI |
| | | | TWAEV | 100 ppm 434 mg/m³ | CA QC OE |
| | | | STEV | 150 ppm 651 mg/m³ | CA QC OE |
| | | | TWA | 100 ppm | CA BC OE |
| | | | STEL | 150 ppm | CA BC OE |
| | | | TWA | 20 ppm | ACGIH |
| Dichlo | ofenthion (ISO) | 97-17-6 | TWA | 20 µg/m3 (OEB 3) | Internal |
| Dionic | | Eurther inform | nation: Skin | 20 µg/m0 (0EB 0) | Internal |
| | | | Wine limit | $200 \mu a/100 cm^2$ | Internal |
| Sodiu | m hydrovido | 1210 72 2 | | 200 µg/100 cm² | |
| Soulu | | 1310-73-2 | | 2 mg/m ^e | |
| | | | | 2 mg/m ³ | |
| | | | C | 2 mg/m ³ | CA QC OE |
| | | | С | 2 mg/m ³ | ACGIH |
| Pheno | ol | 108-95-2 | TWA | 5 ppm 19 mg/m³ | CA AB OE |
| | | | TWA | 5 ppm | CA BC OE |
| | | | TWAEV | 5 ppm 19 mg/m ³ | CA QC OE |
| | | | TWA | 5 ppm | ACGIH |
| m-Cre | esol | 108-39-4 | TWA | 5 ppm 22 mg/m ³ | CA AB OE |
| | | | TWAEV (in- halable frac- tion and va- pour) | 20 mg/m ³ | CA QC OE |
| | | | TWA | 10 mg/m ³ | CA BC OE |
| | | | TWA (Inhalable fraction and vapor) | 20 mg/m ³ | ACGIH |
| p-Cre | sol | 106-44-5 | TŴA | 5 ppm 22 mg/m ³ | CA AB OE |
| | | | TWAEV (in- halable frac- tion and va- pour) | 20 mg/m ³ | CA QC OE |
| | | | TWÁ | 10 mg/m ³ | CA BC OE |
| | | | TWA (Inhalable fraction and | 20 mg/m ³ | ACGIH |



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Biological occupational exposure limits

| Components | CAS-No. | Control parameters | Biological specimen | Sam- pling time | Permissible concentra- tion | Basis |
|----------------------|--|--|---|--|--|--|
| Phenol | 108-95-2 | Phenol | Urine | End of shift (As soon as possible after exposure ceases) | 250 mg/g creatinine | ACGIH BEI |
| Xylene | 1330-20-7 | Methylhippu ric acids | Urine | End of shift (As soon as possible after exposure ceases) | 0.3 g/g creatinine | ACGIH BEI |
| Ethylbenzene | 100-41-4 | Sum of mandelic acid and phenyl glyoxylic acid | Urine | End of shift (As soon as possible after exposure ceases) | 150 mg/g creatinine | ACGIH BEI |
| Engineering measures | : Use tech less All e des prot Cor are the | e appropriate e anologies to co s quick connec engineering co ign and opera tect products, ntainment tech required to co compound to | engineering o ontrol airborr ctions). ontrols should ted in accord workers, and nologies sui ntrol at sour uncontrolled | controls and ne concentr d be implen dance with (d the enviro table for co ce and to p areas (e.g. | d manufacturin ations (e.g., di nented by facil GMP principle nment. ntrolling comp revent migratio , open-face | ig rip- lity s to ounds on of |

containment devices). Minimize open handling.

Use explosion-proof electrical, ventilating and lighting equipment.

| Personal protective equip | pment | |
|---------------------------|-------|--|
| 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 vapor type |
| 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 |
| Eye protection | : | Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, |





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| | | 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. 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 potentia contaminated clothing. | | | | | |
| Skin ar | nd body protection | | | | | | |
| Hygiene measures | | We exposure to chemical is likely during typical use, pre- 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 ou workplace. Wash contaminated clothing before re-use. The effective operation of a facility should include rev | | | | | |
| | | engineering contro appropriate degov industrial hygiene use of administrat | nonitoring, medical surveillance and the ive controls. | | | | |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | viscous liquid |
|---|---|-------------------|
| Color | : | dark, brown |
| Odor | : | strong |
| Odor Threshold | : | No data available |
| рН | : | 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 | : | No data available |
| flammability limit | | |





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| | | | | |
| Vapor pre | essure | : | No data available | |
| Relative | vapor density | : | No data available | |
| Relative | density | : | No data available | |
| Density | | : | 1,009 - 1,051 g/c | m³ (20 °C) |
| Solubility Water | (ies) solubility | : | No data available | |
| Partition | Partition coefficient: n- | | Not applicable | |
| Autoigniti | ion temperature | : | No data available | |
| Decompo | osition temperature | : | No data available | |
| Viscosity Viscos | sity, kinematic | : | No data available | |
| Explosive | e properties | : | Not explosive | |
| Oxidizing | properties | : | The substance or | mixture is not classified as oxidizing. |
| Particle c Particle s | haracteristics size | : | Not applicable | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity Chemical stability Possibility of hazardous reac- tions | : | Not classified as a reactivity hazard. Stable under normal conditions. Flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents. |
|--|---|--|
| Conditions to avoid Incompatible materials Hazardous decomposition products | : | Heat, flames and sparks. Oxidizing agents No hazardous decomposition products are known. |

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Harmful if swallowed.



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| | <u>Produ</u> | <u>ıct:</u> | | | | |
| | Acute | oral toxicity | : | Acute toxicity est Method: Calculat | imate: 1,450 mg/kg ion method | |
| | Acute inhalation toxicity | | : | : Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method | | |
| | Acute dermal toxicity | | : | Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method | | |
| | Comp | oonents: | | | | |
| | Tar, w | vood: | | | | |
| Acute oral toxicity : LD50 (Rat): Method: OE Assessment icity | | LD50 (Rat): > 2,0 Method: OECD T Assessment: The icity | 00 mg/kg est Guideline 423 substance or mixture has no acute oral tox- | | | |
| | Rosin: | | | | | |
| | Acute oral toxicity Acute dermal toxicity | | : | LD50 (Rat): 2,800 |) mg/kg | |
| | | | : | LD50 (Rat): > 2,0 Method: OECD T Assessment: The toxicity | 00 mg/kg est Guideline 402 substance or mixture has no acute dermal | |
| | Tar, c | oal: | | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 1,70 |) mg/kg | |
| | Acute | dermal toxicity | : | LD50 (Rabbit): > | 5,000 mg/kg | |
| | Ethyll | benzene: | | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 3,50 |) mg/kg | |
| | Acute | inhalation toxicity | : | LC50 (Rat): 17.8 Exposure time: 4 Test atmosphere | mg/l h : vapor | |
| | Acute | dermal toxicity | : | LD50 (Rabbit): > | 5,000 mg/kg | |
| | Xylen | e: | | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 3,523 Method: Directive | 3 mg/kg 9 67/548/EEC, Annex V, B.1. | |
| | Acute | inhalation toxicity | : | LC50 (Rat): 27.5 Exposure time: 4 Test atmosphere | 71 mg/l h : vapor | |



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| | Acute | dermal toxicity | : | LD50 (Rabbit): > | 4,200 mg/kg |
| | Dichlo | ofenthion (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 |
| | Sodiu Acute | m hydroxide: inhalation toxicity | : | Assessment: Cor | rosive to the respiratory tract. |
| | Pheno | bl: | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 650 (Method: OECD T | mg/kg ⁻ est Guideline 401 |
| | | | | Acute toxicity est Method: Expert ju | imate (Humans): 140 - 290 mg/kg udgment |
| | Acute | inhalation toxicity | : | LC0 (Rat): 0.9 m Exposure time: 8 Test atmosphere Assessment: Cor | g/l h : dust/mist rosive to the respiratory tract. |
| | | | | Acute toxicity est Exposure time: 4 Test atmosphere Method: Expert ju | imate (Humans): > 0.9 mg/l h : dust/mist udgment |
| | Acute | dermal toxicity | : | LD50 (Rabbit): 66 Method: OECD T | 60 mg/kg Test Guideline 402 |
| | | | | Acute toxicity est Method: Expert ju | imate (Humans): 300 mg/kg udgment |
| | m-Cre | sol: | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 121 Remarks: Based | mg/kg on data from similar materials |
| | Acute | inhalation toxicity | : | Assessment: Cor | rosive to the respiratory tract. |
| | Acute | dermal toxicity | : | LD50 (Rabbit): 30 Remarks: Based | 01 mg/kg on data from similar materials |
| | p-Cres | sol: | | | |
| | Acute | oral toxicity | : | LD50 (Rat): 172 · | - 250 mg/kg |



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| | | | | |
| Ac | ute inhalation toxicity | : A | ssessment: Co | prrosive to the respiratory tract. |
| Ac | ute dermal toxicity | : L | D50 (Rabbit): 2 | 213 - 426 mg/kg |
| Sk Ca | in corrosion/irritation | | | |
| <u>Cc</u> | omponents: | | | |
| Та | r, wood: | | | |
| Sp Me | ecies ethod | : r : C | econstructed h ECD Test Gui | uman epidermis (RhE) deline 439 |
| Sp Me | ecies ethod | : r : C | econstructed h DECD Test Gui | uman epidermis (RhE) deline 431 |
| Re | esult | : 5 | kin irritation | |
| Ro | osin: | | | |
| Sp | ecies | : F | abbit | |
| Me Re | ethod esult | : C : N | ECD Test Gui | deline 404 |
| | | | | |
| Та | r, coal: | | | |
| Sp | ecies | : F | labbit | |
| Re | Sult | : N | ind skin irritatio | |
| Ху | lene: | | | |
| Sp | ecies | : F | abbit | |
| Re | esult | : 5 | kin irritation | |
| Die | chlofenthion (ISO): | | | |
| Re | esult | : N | lild skin irritatio | on |
| Re | emarks | : E | ased on data f | rom similar materials |
| So | dium hydroxide: | | | |
| Re | esult | : 0 | corrosive after | 3 minutes or less of exposure |
| Ph | enol: | | | |
| Sp | ecies | : F | abbit | |
| Ke | Suit | : (| orrosive atter | s minutes to 1 nour of exposure |
| m- | Cresol: | | | |
| Sp | ecies | : F | abbit | |
| Re | esuit | : (| orrosive after | 3 minutes to 1 nour of exposure |
| p-0 | Cresol: | | | |



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| Speci Resu | ies It | : Rabbit : Corrosive afte | 3 minutes to 1 hour of exposure |
| Serio Cause | ous eye damage/eye i es serious eye damag | irritation je. | |
| Com | ponents: | | |
| Tar, v | wood: | | |
| Resu | lt | : Irritation to eye | es, reversing within 7 days |
| Rosi | n: | | |
| Speci | ies | : Rabbit | - |
| Metho | od | : OECD Test G | n uideline 405 |
| Tar. d | coal: | | |
| Speci | ies | : Human | |
| Resu | lt | : Irreversible eff | ects on the eye |
| Xyler | ne: | | |
| Speci Resu | ies It | : Rabbit : Irritation to eye | es, reversing within 21 days |
| Sodiu | um hydroxide: | | |
| Resu | lt | : Irreversible eff | ects on the eye |
| Rema | arks | : Based on skin | corrosivity. |
| Phen | ol: | | |
| Speci | ies | : Rabbit | and any the sure |
| Metho | od | : OECD Test G | uideline 405 |
| m-Cr | esol: | | |
| Speci | ies | : Rabbit | |
| Resu | lt | : Irreversible eff | ects on the eye |
| p-Cre | esol: | | |
| Speci | ies | : Rabbit | |
| Resu | It | : Irreversible eff | ects on the eye |
| Resp | iratory or skin sensi | tization | |
| Skin | sensitization | | |

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.



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|--|--|--|---|--|--|
| Co | mponents: | | | | |
| Ta Te Ro Sp Me Re | r, wood: st Type outes of exposure ecies ethod esult | Local lymph Skin contact Mouse OECD Test 0 positive | node assay (LLNA) Guideline 429 | | |
| As | sessment | : Probability or rate in huma | evidence of low to moderate skin sensitization | | |
| Ro Te Ro Sp Me Re | esin: st Type outes of exposure ecies ethod esult | : Local lymph : Skin contact : Mouse : OECD Test 0 : negative | node assay (LLNA) Guideline 429 | | |
| Ta Te Ro Sp Me Re Re | r, coal: st Type outes of exposure ecies ethod sult marks sessment | Local lymph node assay (LLNA) Skin contact Mouse OECD Test Guideline 429 positive Based on data from similar materials Probability or evidence of skin sensitization in humans | | | |
| Xy Te Ro Sp Re | lene: st Type outes of exposure ecies esult | : Local lymph : Skin contact : Mouse : negative | node assay (LLNA) | | |
| Dia Ro As Re Re | chlofenthion (ISO): outes of exposure sessment esult emarks | : Dermal : Does not cau : Weak sensiti : Based on dat | se skin sensitization. zer a from similar materials | | |
| So Te Ro Re | dium hydroxide: st Type outes of exposure sult | : Human repea : Skin contact : negative | at insult patch test (HRIPT) | | |
| Ph Te Ro | enol: st Type outes of exposure | : Buehler Test : Skin contact | | | |



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| | Species Method Result | | : | : Guinea pig : OECD Test Guideline 406 : negative | | | | | | |
| | p-Cres Test Ty Routes Specie Result | p ol: ype s of exposure s | : | Draize Test Skin contact Guinea pig negative | | | | | | |
| | Germ of Suspect | cell mutagenicity | ic de | fects. | | | | | | |
| | Compo | onents: | | | | | | | | |
| | Tar, w | ood: | | | | | | | | |
| | Genotoxicity in vitro | | : | Test Type: Bacte Method: OECD T Result: negative | rial reverse mutation assay (AMES) Test Guideline 471 | | | | | |
| | Rosin: | | | | | | | | | |
| | Genotoxicity in vitro | | : | Test Type: Bacte Method: OECD T Result: negative | rial reverse mutation assay (AMES) est Guideline 471 | | | | | |
| | | | | Test Type: In vitr Method: OECD T Result: negative | o mammalian cell gene mutation test est Guideline 476 | | | | | |
| | | | | Test Type: Chror Method: OECD T Result: negative | nosome aberration test in vitro est Guideline 473 | | | | | |
| | Tar co | al. | | | | | | | | |
| | Genoto | oxicity in vitro | : | Test Type: Bacte Method: OECD T Result: positive Remarks: Based | rial reverse mutation assay (AMES) est Guideline 471 on data from similar materials | | | | | |
| | Germ o Assess | cell mutagenicity - sment | : | Positive result(s) mutagenicity test mutagenicity ass Remarks: Based | from in vivo non-mammalian somatic cell s, supported by positive results from in vitro ays. on national or regional regulation. | | | | | |
| | Ethvlb | enzene: | | | | | | | | |
| | Genoto | oxicity in vitro | : | Test Type: Bacte Result: negative | rial reverse mutation assay (AMES) | | | | | |
| | | | | Test Type: In vitr Method: OECD T Result: negative | o mammalian cell gene mutation test est Guideline 476 | | | | | |



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| | | | Test Type: Chron Result: negative | nosome aberration test in vitro | |
| 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 | | |
| Xy | ylene: | | | | |
| G | enotoxicity in vitro | : | Test Type: Bacter Result: negative | rial reverse mutation assay (AMES) | |
| | | | Test Type: Chron Result: negative | nosome aberration test in vitro | |
| | | | Test Type: In vitro Result: negative | o mammalian cell gene mutation test | |
| | | | Test Type: In vitro malian cells Result: negative | o sister chromatid exchange assay in mam- | |
| G | enotoxicity in vivo | : | Test Type: Roder Species: Mouse Application Route Result: negative | nt dominant lethal test (germ cell) (in vivo) e: Skin contact | |
| Pł | henol: | | | | |
| G | enotoxicity in vitro | : | Test Type: Chrom Method: OECD T Result: positive | nosome aberration test in vitro est Guideline 473 | |
| G | enotoxicity in vivo | : | Test Type: Mamn cytogenetic assay Species: Mouse Application Route Method: OECD T Result: positive Remarks: Annex | nalian erythrocyte micronucleus test (in vivo /) e: Intraperitoneal injection est Guideline 474 VI From 1272/2008 | |
| Go As | erm cell mutagenicity - ssessment | : | Positive result(s) genicity tests. | from in vivo mammalian somatic cell muta- | |
| m | -Cresol: | | | | |
| G | enotoxicity in vitro | : | Test Type: Chrom Method: OECD T Result: positive | nosome aberration test in vitro est Guideline 473 | |
| | | | Test Type: Bacter | rial reverse mutation assay (AMES) | |



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| | | | Method: OECD To Result: negative | est Guideline 471 | | | |
| Ge | notoxicity 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-C | Cresol: | | | | | | |
| Ge | notoxicity in vitro | : | Test Type: Chrom Method: OECD To Result: positive | osome aberration test in vitro est Guideline 473 | | | |
| | | | Test Type: In vitro Method: OECD To Result: negative | o mammalian cell gene mutation test est Guideline 476 | | | |
| Ge | notoxicity in vivo | : | Test Type: Roden Species: Mouse Application Route Method: OECD To Result: negative | it dominant lethal test (germ cell) (in vivo) : Ingestion est Guideline 478 | | | |
| Ca Ma | rcinogenicity y cause cancer if swallowe | ed. | | | | | |
| <u>Co</u> | mponents: | | | | | | |
| Tar | r, coal: | | | | | | |
| Spe Apj Exp Re: | ecies plication Route posure time sult | : : | Mouse Ingestion 2 Years positive | | | | |
| Ca me | rcinogenicity - Assess- nt | : | Positive evidence Remarks: Based | from human epidemiological studies (oral) on national or regional regulation. | | | |
| Eth | vlbenzene: | | | | | | |
| Spe App Exp Res Res | ecies plication Route posure time sult marks | : | Rat inhalation (vapor) 104 weeks positive The mechanism c mans. | or mode of action may not be relevant in hu- | | | |
| Xvl | lene: | | | | | | |
| Spe App Exp | ecies plication Route posure time | : | Rat Ingestion 103 weeks | | | | |



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|--------------|-----------------------------------|---------------------------|----------|---|---|--|
| F | Result | | : | negative | | |
| F | Phenol | : | | | | |
| ç | Species | | | Mouse | | |
| Å | Applica | tion Route | ÷ | Ingestion | | |
| Ē | Exposu | re time | : | 103 weeks | | |
| ſ | Method | | : | OECD Test Guide | eline 451 | |
| F | Result | | : | negative | | |
| r | m-Cres | ol: | | | | |
| S | Species | 3 | : | Mouse, males | | |
| ļ | Applica | tion Route | : | Ingestion | | |
| E | Exposu | re time | : | 105 weeks | | |
| F | Result | | : | equivocal | | |
| F | Remark | S | : | Based on data fro | m similar materials | |
| S | Species | 5 | : | Mouse. female | | |
| ļ | Applica | tion Route | : | Ingestion | | |
| E | Exposu | re time | : | 106 - 107 weeks | | |
| F | Result | | : | positive | | |
| F | Remark | S | : | Based on data fro | m similar materials | |
| (r | Carcinogenicity - Assess- ment | | : | Weight of evidence does not support classification as a car- cinogen | | |
| F | p-Cres | ol: | | | | |
| | Species | 6 | : | Mouse | | |
| A | Applica | tion Route | : | Ingestion | | |
| E | Exposu | re time | : | 106 - 107 weeks | | |
| F | Result | | : | negative | | |
| F | Remark | KS | : | Based on data fro | m similar materials | |
| F | Reproc | luctive toxicity | | | | |
| 5 | Suspec | ted of damaging the u | nbo | rn child. | | |
| <u>(</u> | Compo | onents: | | | | |
| F | Rosin: | | | | | |
| E | Effects | on fertility | : | Test Type: Combiner reproduction/dever Species: Rat Application Route Method: OECD To Result: negative | ned repeated dose toxicity study with the elopmental toxicity screening test : Ingestion est Guideline 422 | |
| E | Effects | on fetal development | : | Test Type: Embry Species: Rat Application Route Method: OECD To Result: negative | o-fetal development : Ingestion est Guideline 414 | |





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|-------------|--|-------------------------------|--|---|---|--|--|
| | Ethylb Effects | enzene: on fertility | : Test Type: Two-generation reproduction toxicity stud Species: Rat Application Route: inhalation (vapor) Method: OECD Test Guideline 416 Result: negative | | | | |
| | Effects on fetal development | | : | Test Type: Embryo-fetal development Species: Rat Application Route: Inhalation Method: OECD Test Guideline 414 Result: negative | | | |
| | Xylene | : | | | | | |
| | Effects on fertility | | : | Test Type: One-c Species: Rat Application Route Result: negative | eneration reproduction toxicity study e: inhalation (vapor) | | |
| | Effects on fetal development | | : | Test Type: Embry Species: Rat Application Route Result: negative | vo-fetal development e: inhalation (vapor) | | |
| | Dichlofenthion (ISO): Effects on fetal development | | : | Test Type: Devel Species: Mouse Application Route Developmental T Result: Reduced Remarks: Based | opment e: Intraperitoneal oxicity: LOAEL: 80 mg/kg body weight fetal weight., Embryotoxic effects. on data from similar materials | | |
| | | | | Test Type: Devel Species: Rat Application Route Developmental T Result: Reduced teratogenic effect Remarks: Based | opment e: Intraperitoneal oxicity: LOAEL: 10 mg/kg body weight fetal weight., Embryotoxic effects., No s. on data from similar materials | | |
| | Reproc sessme | luctive toxicity - As- ent | : | Suspected of dan | naging the unborn child. | | |
| | Pheno | l: | | | | | |
| | Effects | on fertility | : | Test Type: Two-g Species: Rat Application Route Method: OECD T Result: negative | eneration reproduction toxicity study e: Ingestion est Guideline 416 | | |
| | Effects | on fetal development | : | Test Type: Embry Species: Mouse | vo-fetal development | | |



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| | | | | Application Route Method: OECD To Result: negative | : Ingestion est Guideline 414 |
| | m-Cres | sol: | | | |
| | Effects | on fertility | : | Test Type: Two-g Species: Rat Application Route Result: negative | eneration reproduction toxicity study : Ingestion |
| | Effects | on fetal development | : | Test Type: Prenat Species: Rat Application Route Result: negative | al development toxicity study (teratogenicity) : Ingestion |
| | p-Cres | ol: | | | |
| | Effects | on fertility | : | Test Type: Two-g Species: Rat Application Route Result: negative | eneration reproduction toxicity study : Ingestion |
| | Effects | on fetal development | : | Test Type: Embry Species: Rat Application Route Result: negative | o-fetal development : Ingestion |
| | STOT-s May ca Causes | single exposure use respiratory irritatio damage to organs (N | n. ervo | ous system). | |
| | Compo | onents: | | | |
| | Tar, co | al: | | | |
| | Routes Target Assess | of exposure Organs ment | : | Ingestion Nervous system Shown to produce centrations of 300 | e significant health effects in animals at con- mg/kg bw or less. |
| | Xylene | : | | | |
| | Assess | ment | : | May cause respira | atory irritation. |
| | STOT-I Causes May ca Auditor | repeated exposure damage to organs (Norgans damage to organs) use damage to organs | erva (Ce | ous system) throug entral nervous syste ed or repeated exp | h prolonged or repeated exposure. em, Kidney, Liver, Skin, Respiratory Tract, osure |
| | Compo | onents: | | | |
| | Tar, co Target Assess | al: Organs ment | : | Respiratory Tract Shown to produce | e significant health effects in animals at con- |





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| | | centrations of > | 0.02 to 0.2 mg/l/6h/d. | | | | |
| Rou Tarı Ass | ites of exposure get Organs essment | inhalation (dust/mist/fume) Respiratory Tract Shown to produce significant health effects in animals at concentrations of >0.02 to 0.2 mg/l/6h/d. | | | | | |
| Eth | ylbenzene: | | | | | | |
| Rou Tarç Ass | ites of exposure get Organs essment | inhalation (vapore) Auditory system Shown to produce centrations of > | or) n ice significant health effects in animals at con- 0.2 to 1 mg/l/6h/d. | | | | |
| Xyle | ene: | | | | | | |
| Routes of exposure Target Organs Assessment | | inhalation (vapore) Auditory system Shown to produce centrations of > | or) n uce significant health effects in animals at con- 0.2 to 1 mg/l/6h/d. | | | | |
| Dic | hlofenthion (ISO): | | | | | | |
| Tar Ass | get Organs essment | : Nervous systen : Causes damag exposure. | n e to organs through prolonged or repeated | | | | |
| Ren | narks | : Based on human experience. | | | | | |
| Phe | nol: | | | | | | |
| Tar <u>(</u> Ass | get Organs essment | Central nervous May cause dan exposure. | s system, Kidney, Liver, Skin hage to organs through prolonged or repeated | | | | |
| Rep | eated dose toxicity | | | | | | |
| Cor | nponents: | | | | | | |
| Ros | sin: | | | | | | |
| Spe NO/ App Exp Met | cies AEL lication Route osure time hod | : Rat, male : 335 mg/kg : Ingestion : 90 Days : OECD Test Gu | ideline 408 | | | | |
| Eth | ylbenzene: | | | | | | |
| Spe | cies | : Rat | | | | | |
| LÖA | \EL | : 0.868 mg/l | | | | | |
| App | lication Route | : inhalation (vapo | pr) | | | | |
| Exp | osure time | : 13 Weeks | | | | | |
| Spe | cies | : Rat | | | | | |
| NO | AEL | : 75 mg/kg | | | | | |
| LOA | \EL | : 250 mg/kg | | | | | |
| | | 22 / 33 | | | | | |





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| | Application Route Method | | : Ingestion : OECD Test Guideline 408 | | | | | | | |
| | Xylene Species LOAEL Applica Exposu Remark Species LOAEL Applica Exposu | tion Route re time cs tion Route re time | | Rat > 0.2 - 1 mg/l inhalation (vapor) 13 Weeks Based on data fro Rat 150 mg/kg Ingestion 90 Days | m similar materials | | | | | |
| | Dichlof Species NOAEL Applica Exposu | Tenthion (ISO): 5 tion Route re time | : | Rat 0.75 mg/kg Oral 90 d | | | | | | |
| | Species NOAEL Applica Exposu | s tion Route re time | : : : | Dog 0.75 mg/kg Oral 90 d | | | | | | |
| | Phenol Species LOAEL Applica Exposu Method | : s tion Route re time | : | Rat 300 mg/kg Ingestion 90 Days OECD Test Guide | line 408 | | | | | |
| | Species NOAEL Applica Exposu | s tion Route re time | :: | Rat >= 0.1 mg/l inhalation (vapor) 74 Days | | | | | | |
| | Species LOAEL Applica Exposu | s tion Route re time | : : | Rabbit 260 mg/kg Skin contact 18 Days | | | | | | |
| | m-Cres Species NOAEL Applica Exposu Method | s ol: s tion Route re time | : | Rat 150 mg/kg Ingestion 13 Weeks OECD Test Guide | line 408 | | | | | |



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Dichlofenthion Formulation

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| p-Cre | esol: | | | |
| Spec | ies | : Rat | | |
| NOAI | EL | : 50 mg | /kg | |
| LOAE | EL | : 175 m | ig/kg | |
| Application Route | | : Ingest | ion | |
| Expo | sure time | : 90 Da | ys | |
| Meth | od | : OECD | Test Guide | eline 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 sensitization by skin contact |
| Eye contact | : | Symptoms: constriction of pupils, central nervous system ef- fects |
| Ingestion | : | Symptoms: Nausea, Diarrhea, Vomiting, sweating, Lachry- mation, constriction of pupils, Central nervous system depres- sion, Gastrointestinal disturbance, bronchospasm, central nervous system effects, Edema |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Tar, wood:

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





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| F | Toxicity plants | r to algae/aquatic | : | EC50 (Desmodes Exposure time: 72 Method: OECD T EC10 (Desmodes Exposure time: 72 Method: OECD T | smus subspicatus (green algae)): 17 mg/l 2 h est Guideline 201 smus subspicatus (green algae)): 14 mg/l 2 h est Guideline 201 |
| I | Rosin: | | | | |
| - | Toxicity | r to fish | : | LL50 (Danio rerio Exposure time: 96 Test substance: V Method: OECD To Remarks: Based | (zebra fish)): > 1 - 10 mg/l 5 h Vater Accommodated Fraction est Guideline 203 on data from similar materials |
| - | Toxicity aquatic | to daphnia and other invertebrates | : | EL50 (Daphnia m Exposure time: 48 Test substance: V Method: OECD T | agna (Water flea)): 911 mg/l 3 h Vater Accommodated Fraction est Guideline 202 |
| ŀ | Toxicity plants | r to algae/aquatic | : | EL50 (Raphidoce 1,000 mg/l Exposure time: 72 Test substance: V Method: OECD Te | lis subcapitata (freshwater green alga)): > 2 h Vater Accommodated Fraction est Guideline 201 |
| | | | | NOELR (Raphido 1,000 mg/l Exposure time: 72 Test substance: V Method: OECD Te | celis subcapitata (freshwater green alga)): 2 h Vater Accommodated Fraction est Guideline 201 |
| - | Toxicity | to microorganisms | : | EC50 (activated s Exposure time: 3 Method: OECD T | sludge): > 10,000 mg/l h est Guideline 209 |
| - | Tar, co | al: | | | |
| - | Toxicity | r to fish | : | LL50 (Danio rerio Exposure time: 96 Test substance: V Method: OECD To Remarks: Based | (zebra fish)): > 250 mg/l 5 h Vater Accommodated Fraction est Guideline 203 on data from similar materials |
| - | Toxicity aquatic | to daphnia and other invertebrates | : | EL50 (Daphnia m Exposure time: 48 Test substance: V Method: OECD To Remarks: Based | agna (Water flea)): 2.8 mg/l 3 h Vater Accommodated Fraction est Guideline 202 on data from similar materials |
| 1 | Toxicity plants | to algae/aquatic | : | EL50 (Desmodes Exposure time: 72 Method: OECD T | mus subspicatus (green algae)): 36 mg/l 2 h est Guideline 201 |



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| | | | | Remarks: Based | on data from similar materials |
| | | | | NOELR (Desmod Exposure time: 72 Method: OECD To Remarks: Based of | esmus subspicatus (green algae)): 5 mg/l 2 h est Guideline 201 on data from similar materials |
| | Ethylbe | enzene: | | | |
| | Toxicity | r to fish | : | LC50 (Oncorhync Exposure time: 96 Method: OECD To | hus mykiss (rainbow trout)): 4.2 mg/l እ h est Guideline 203 |
| | Toxicity aquatic | to daphnia and other invertebrates | : | EC50 (Daphnia m Exposure time: 48 | agna (Water flea)): 1.8 - 2.4 mg/l 3 h |
| | Toxicity plants | to algae/aquatic | : | EC50 (Pseudokiro mg/l Exposure time: 96 | chneriella subcapitata (green algae)): 3.6 Sh |
| | | | | NOEC (Pseudokii mg/l Exposure time: 96 | rchneriella subcapitata (green algae)): 3.4 Sh |
| | Toxicity aquatic | to daphnia and other invertebrates (Chron- tv) | : | NOEC (Ceriodaph Exposure time: 7 | nnia dubia (water flea)): 0.96 mg/l d |
| | Toxicity | to microorganisms | : | EC50 (Nitrosomo Exposure time: 24 | nas sp.): 96 mg/l I h |
| | Xylene | : | | | |
| | Toxicity | r to fish | : | LC50 (Oncorhync Exposure time: 96 | hus mykiss (rainbow trout)): 13.5 mg/l 3 h |
| | Toxicity aquatic | to daphnia and other invertebrates | : | EC50 (Daphnia m Exposure time: 24 Method: OECD To Remarks: Based of | agna (Water flea)): > 1 - 10 mg/l l h est Guideline 202 on data from similar materials |
| | Toxicity plants | to algae/aquatic | : | EC50 (Skeletoner Exposure time: 72 | na costatum (marine diatom)): 10 mg/l 2 h |
| | Toxicity icity) | to fish (Chronic tox- | : | NOEC (Danio reri Exposure time: 35 Method: OECD To Remarks: Based of | o (zebra fish)): > 0.1 - < 1 mg/l 5 d est Guideline 210 on data from similar materials |
| | Toxicity aquatic ic toxici | to daphnia and other invertebrates (Chron- ty) | : | EL10 (Daphnia m Exposure time: 21 Method: OECD To Remarks: Based of | agna (Water flea)): > 1 - 10 mg/l d est Guideline 211 on data from similar materials |
| | Toxicity | to microorganisms | : | NOEC: > 100 mg/ | 1 |



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| | | | | Exposure time: 3 Method: OECD Te Remarks: Based o | n est Guideline 209 on data from similar materials |
| | Dichlo | fenthion (ISO): | | | |
| | Toxicity | / to fish | : | LC50 (No species Exposure time: 96 Method: OECD Te | specified): 0.64 mg/l h est Guideline 203 |
| | | | | LC50 (Lepomis m Exposure time: 96 Method: OECD Te | acrochirus (Bluegill sunfish)): 1.23 mg/l 5 h est Guideline 203 |
| | Toxicity aquatic | / to daphnia and other invertebrates | : | EC50 (Daphnia m Exposure time: 48 Method: OECD Te | agna (Water flea)): 0.0011 mg/l 5 h est Guideline 202 |
| | Pheno | : | | | |
| | Toxicity | <i>i</i> to fish | : | LC50 (Pimephales Exposure time: 96 | s promelas (fathead minnow)): 24.9 mg/l i h |
| | Toxicity aquatic | v to daphnia and other invertebrates | : | EC50 (Ceriodaphi Exposure time: 48 | nia dubia (water flea)): 3.1 mg/l s h |
| | Toxicity plants | ∕ to algae/aquatic | : | EC50 (Selenastru Exposure time: 96 | m capricornutum (green algae)): 61.1 mg/l i h |
| | Toxicity icity) | v to fish (Chronic tox- | : | NOEC: 0.077 mg/ Exposure time: 60 | l d |
| | Toxicity aquatic | v to daphnia and other invertebrates (Chron- | : | NOEC (Daphnia r Exposure time: 16 | nagna (Water flea)): 10 mg/l s d |
| | Toxicity | ic toxicity) Toxicity to microorganisms | | IC50 (Nitrosomon Exposure time: 24 | as sp.): 21 mg/l · h |
| | m-Cres | sol. | | | |
| | Toxicity | <i>i</i> to fish | : | LC50 (Oncorhync Exposure time: 96 | hus mykiss (rainbow trout)): 8.6 mg/l 5 h |
| | Toxicity aquatic | v to daphnia and other invertebrates | : | EC50 (Daphnia pu Exposure time: 48 | ulex (Water flea)): > 99.5 mg/l s h |
| | Toxicity icity) | / to fish (Chronic tox- | : | NOEC (Pimephale Exposure time: 32 Remarks: Based o | es promelas (fathead minnow)): 1.35 mg/l : d on data from similar materials |
| | Toxicity aquatic ic toxici | / to daphnia and other invertebrates (Chron- ity) | : | NOEC (Daphnia r Exposure time: 21 Remarks: Based o | nagna (Water flea)): 1 mg/l d on data from similar materials |



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| | p-Cres | ol: | | | | | |
| | Toxicity | r to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 7.4 mg/l Exposure time: 96 h | | | |
| | Toxicity aquatic | to daphnia and other invertebrates | : | EC50 (Daphnia magna (Water flea)): 7.7 mg/l Exposure time: 48 h Method: DIN 38412 | | | |
| | Toxicity plants | to algae/aquatic | : | EC50 (Desmodesmus subspicatus (green algae)): 7.8 mg/l Exposure time: 48 h | | | |
| | | | | EC10 (Desmodes Exposure time: 48 | mus subspicatus (green algae)): 2.3 mg/l h | | |
| | Toxicity icity) | to fish (Chronic tox- | : | NOEC (Pimephale Exposure time: 32 | es promelas (fathead minnow)): 1.35 mg/l : d | | |
| | Toxicity aquatic | Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity) Toxicity to microorganisms | | NOEC (Daphnia magna (Water flea)): 1 mg/l Exposure time: 21 d | | | |
| | Toxicity | | | IC50 (Nitrosomonas sp.): 260 mg/l Exposure time: 24 h | | | |
| | Persistence and degradabili | | ty | | | | |
| | Compo | onents: | | | | | |
| | Tar, wo | ood: | | | | | |
| | Biodegi | Biodegradability | | Result: Not readily Biodegradation: 4 Exposure time: 28 Method: OECD Te | / biodegradable. 17 % 5 d est Guideline 301B | | |
| | Rosin: | | | | | | |
| | Biodegi | radability | : | Result: Readily bio Biodegradation: 7 Exposure time: 28 Method: OECD Te | odegradable. /1 % /d est Guideline 301D | | |
| | Ethylbe | enzene: | | | | | |
| | Biodegi | radability | : | Result: Readily bio Biodegradation: 7 Exposure time: 28 | odegradable. /0 - 80 % i d | | |
| | Xylene | : | | | | | |
| | Biodegi | radability | : | Result: Readily bid Biodegradation: > Exposure time: 28 Method: OECD Te Remarks: Based of | odegradable. 70 % 6 d est Guideline 301F on data from similar materials | | |





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| | Phenol | : | | | | | |
| | Biodegradability | | : | Result: Readily biodegradable. Biodegradation: 62 % Exposure time: 10 d Method: OECD Test Guideline 301C | | | |
| | m-Cres | sol: | | | | | |
| | Biodegi | radability | : | Result: Readily bi Biodegradation: 9 Exposure time: 28 Method: OECD To | odegradable. 90 % 3 d est Guideline 301D | | |
| | p-Cres | ol: | | | | | |
| | Biodegi | radability | : | Result: Readily bi Biodegradation: 7 Exposure time: 8 | odegradable. 100 % d | | |
| | Bioacc | umulative potential | | | | | |
| | <u>Compo</u> | onents: | | | | | |
| | Tar, wo | ood: | | | | | |
| | Partition octanol | n coefficient: n- /water | : | log Pow: 0.2 - 2.0 | 2 | | |
| | Rosin: | | | | | | |
| | Partition octanol | n coefficient: n- /water | : | log Pow: > 3 - 6.2 Method: OECD To | est Guideline 117 | | |
| | Tar, co | al: | | | | | |
| | Partition octanol | n coefficient: n- /water | : | Remarks: No data | a available | | |
| | Ethylbe | enzene: | | | | | |
| | Partition octanol | n coefficient: n- /water | : | log Pow: 3.6 | | | |
| | Xylene | : | | | | | |
| | Partition octanol | n coefficient: n- /water | : | log Pow: 3.16 Remarks: Calcula | ition | | |
| | Dichlof | enthion (ISO): | | | | | |
| | Partition octanol | n coefficient: n- /water | : | log Pow: 5.14 | | | |
| | Phenol | : | | | | | |
| | Bioaccu | umulation | : | Species: Fish Bioconcentration to Method: OECD To | factor (BCF): 17.5 est Guideline 305 | | |
| | Partition | n coefficient: n- | : | log Pow: 1.47 | | | |





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|--------------|--|---------------------------------------|------------------------------|--|---|--|
| C | octanol/ | /water | | | | |
| r | m-Cres | ol: | | | | |
| E | Bioaccumulation | | : | : Species: Leuciscus idus (Golden orfe) Bioconcentration factor (BCF): 17 - 20 | | |
| F | Partition coefficient: n- octanol/water | | : | log Pow: 1.96 | | |
| F | p-Creso | ol: | | | | |
| E | Bioaccumulation | | : | Species: Leuciscus idus (Golden orfe) Bioconcentration factor (BCF): 17 - 20 Remarks: Based on data from similar materials | | |
| F | Partitior | n coefficient: n- /water | : | log Pow: 1.94 | | |
| ſ | Mobility | y in soil | | | | |
| 1 | No data | available | | | | |
| (1 | Other a No data | idverse effects a available | | | | |

SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods | | |
|------------------------|---|--|
| Waste from residues | : | Do not dispose of waste into sewer. 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 | : | 11 |
| Labels | : | 8 (3) |
| Environmentally hazardous | : | yes |
| IATA-DGR | | |
| UN/ID No. | : | UN 2920 |
| Proper shipping name | : | Corrosive liquid, flammable, n.o.s. (Sodium hydroxide, Ethylbenzene) |





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|-------------|---|------------------------------|----------|--|---|
| | Class Subsidiary risk Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft) IMDG-Code UN number Proper shipping name Class Subsidiary risk Packing group Labels EmS Code Marine pollutant | | : | 8 3 II Corrosive, Flamm 855 851 | able Liquids |
| | | | | UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Sodium hydroxide, Ethylbenzene, Dichlofenthion (ISC 8 3 II 8 (3) F-E, S-C ves | |
| | Transport in bulk according to A Not applicable for product as supp Domestic regulation | | | Annex II of MARP blied. | OL 73/78 and the IBC Code |
| | | | | | |
| | TDG UN nun Proper | nber shipping name | : | UN 2920 CORROSIVE LIQ (Sodium hydroxic | UID, FLAMMABLE, N.O.S. le, Ethylbenzene) |

Class : 8 Subsidiary risk : 3 Packing group : Ш Labels : 8 (3) ERG Code : 132 yes(Dichlofenthion (ISO)) Marine pollutant :

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

The ingredients of this product are reported in the following inventories:

| AICS | : | not determined |
|-------|---|----------------|
| DSL | : | not determined |
| IECSC | : | not determined |





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SECTION 16. OTHER INFORMATION

| Full text of other abbreviations | | | | | |
|----------------------------------|---|---|--|--|--|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) | | | |
| ACGIH BEI | : | ACGIH - Biological Exposure Indices (BEI) | | | |
| CA AB OEL | : | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL) | | | |
| CA BC OEL | : | Canada. British Columbia OEL | | | |
| CA ON OEL | : | Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act. | | | |
| CA QC OEL | : | Québec. Regulation respecting occupational health and safe- ty, Schedule 1, Part 1: Permissible exposure values for air- borne contaminants | | | |
| ACGIH / TWA | : | 8-hour, time-weighted average | | | |
| ACGIH / C | : | Ceiling limit | | | |
| CA AB OEL / TWA | : | 8-hour Occupational exposure limit | | | |
| CA AB OEL / STEL | : | 15-minute occupational exposure limit | | | |
| CA AB OEL / (c) | : | ceiling occupational exposure limit | | | |
| CA BC OEL / TWA | : | 8-hour time weighted average | | | |
| CA BC OEL / STEL | : | short-term exposure limit | | | |
| CA BC OEL / C | : | ceiling limit | | | |
| CA ON OEL / TWA | : | Time-Weighted Average Limit (TWA) | | | |
| CA QC OEL / TWAEV | : | Time-weighted average exposure value | | | |
| CA QC OEL / STEV | : | Short-term exposure value | | | |
| CA QC OEL / C | : | Ceiling | | | |

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; IECSC - 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; KECI - 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Sub-



according to the Hazardous Products Regulations

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| stanc mend lative | es Control Act (United lations on the Transport ; WHMIS - Workplace H | Sta t of I laza | tes); UN - United Dangerous Goods rdous Materials Ir | d Nations; UNRTDG - United Nations Recom- s; vPvB - Very Persistent and Very Bioaccumu- iformation System |
| Sourc comp Data | ces of key data used to ile the Material Safety Sheet | : | Internal technica eChem Portal so cy, http://echa.e | al data, data from raw material SDSs, OECD earch results and European Chemicals Agen- uropa.eu/ |
| Revis | ion Date | : | 09/28/2024 | |

| Date format | : 1 | mm/dd/yyyy |
|-------------|-----|------------|

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.

CA / Z8