

DATRAL

| PATR | OL | | | |
|----------------|-------------------------------|------|---|--|
| Version 1.1 | Revision Date: 04/04/2023 | | S Number: 421013872 | This version replaces all previous versions. |
| SECTION | 1. IDENTIFICATION | | | |
| Produ | ict name | : | PATROL | |
| Desig | n code. | : | A12690A | |
| Produ | ct Registration number | : | 100-1066 | |
| Manu | facturer or supplier's o | deta | ils | |
| Comp | any name of supplier | : | Syngenta Crop | Protection, LLC |
| Addre | SS | : | Post Office Bo Greensboro N United States | |
| Telepł | hone | : | 1 800 334 948 | 1 |
| Telefa | х | : | 1 336 632 219 | 2 |
| | il address gency telephone | | sds.requests@ 1 800 888 837 | |
| Reco | mmended use of the c | hen | nical and restri | ctions on use |
| Recor | mmended use | : | Insecticide | |
| Restri | ictions on use | : | General Use F | Pesticide |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) , a taviaity (Inhalation) : Cata . .

| Acute toxicity (Inhalation) | : | Category 4 |
|---|---|---|
| Skin sensitization | : | Category 1 |
| GHS label elements Hazard pictograms | : | |
| Signal Word | : | Warning |
| Hazard Statements | : | H317 May cause an allergic skin reaction. H332 Harmful if inhaled. |

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| Preca | autionary Statements | P271 Use only P272 Contami the workplace. P280 Wear pr | reathing mist or vapors. / outdoors or in a well-ventilated area. nated work clothing must not be allowed out of otective gloves. |
| | | P304 + P340 and keep com doctor if you fe P333 + P313 attention. | IF ON SKIN: Wash with plenty of soap and water. + P312 IF INHALED: Remove person to fresh air fortable for breathing. Call a POISON CENTER/ eel unwell. If skin irritation or rash occurs: Get medical advice ontaminated clothing before reuse. |
| | | Disposal: P501 Dispose posal plant. | of contents/ container to an approved waste dis- |

Other hazards

May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|-------------------------------------|------------------|-----------------------|
| lambda-cyhalothrin | 91465-08-6 | 9.5511 |
| Hydrocarbons, C9, Aromatics | 128601-23-0 | >= 5 - < 10 |
| propane-1,2-diol | 57-55-6 | >= 1 - < 5 |
| orthophosphoric acid | 7664-38-2 | >= 1 - < 5 |
| dioxosilane | 14808-60-7 | >= 0.1 - < 1 |
| 1,2-benzisothiazol-3(2H)-one | 2634-33-5 | >= 0.1 - < 1 |
| Actual concentration is withheld as | s a trade secret | |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

| General advice | : | Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment. |
|-------------------------|---|--|
| lf inhaled | : | Take the victim into fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control center immediately. |
| In case of skin contact | : | Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. |



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| | | | Wash contaminat | ted clothing before re-use. |
| | In case of eye contact | : | for at least 15 mi Remove contact | |
| | If swallowed | : | If swallowed, see container or label Do NOT induce v | |
| | Most important symptoms and effects, both acute and delayed | : | Skin contact pare | ause pulmonary edema and pneumonitis. esthesia effects (itching, tingling, burning or ransient, lasting up to 24 hours. |
| | Notes to physician | : | Do not induce voi aromatic solvents Treat symptomat | |
| SEC | TION 5. FIRE-FIGHTING MEA | ASL | RES | |
| | Suitable extinguishing media | : | Extinguishing me Use water spray, carbon dioxide. Extinguishing me Alcohol-resistant or Water spray | alcohol-resistant foam, dry chemical or dia - large fires |
| | Unsuitable extinguishing media | : | Do not use a soli fire. | d water stream as it may scatter and spread |
| | Specific hazards during fire fighting | : | will produce dens products of comb | ontains combustible organic ingredients, fire black smoke containing hazardous oustion (see section 10). omposition products may be a hazard to |
| | Further information | : | courses. | off from fire fighting to enter drains or water ainers exposed to fire with water spray. |
| | Special protective equipment for fire-fighters | : | Wear full protecti apparatus. | ve clothing and self-contained breathing |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency procedures | : | Refer to protective measures listed in sections 7 and 8. |
|---|---|--|
| Environmental precautions | : | Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. |



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| | ods and materials for inment and cleaning up | absorbent ma vermiculite) a local / nationa Clean contan Clean with de | age, and then collect with non-combustible aterial, (e.g. sand, earth, diatomaceous earth, and place in container for disposal according to al regulations (see section 13). ninated surface thoroughly. etergents. Avoid solvents. ispose of contaminated wash water. |
| | | | |
| ECTION | 7. HANDLING AND ST | ORAGE | |
| | 7. HANDLING AND STO | : No special pr Avoid contac When using o | otective measures against fire required. t with skin and eyes. do not eat, drink or smoke. protection see section 8. |

| Further information on stor- age stability | : | Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient |
|---|---|---|
| age stability | | temperatures. |

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 |
|-----------------------------|-------------|-------------------------------------|--|-----------|
| lambda-cyhalothrin | 91465-08-6 | TWA | 0.04 mg/m3 (Skin) | Syngenta |
| Hydrocarbons, C9, Aromatics | 128601-23-0 | TWA | 19 ppm 100 mg/m3 | Supplier |
| propane-1,2-diol | 57-55-6 | TWA | 10 mg/m3 | US WEEL |
| orthophosphoric acid | 7664-38-2 | TWA | 1 mg/m3 | ACGIH |
| | | STEL | 3 mg/m3 | ACGIH |
| | | TWA | 1 mg/m3 | NIOSH REL |
| | | ST | 3 mg/m3 | NIOSH REL |
| | | TWA | 1 mg/m3 | OSHA Z-1 |
| | | TWA | 1 mg/m3 | OSHA P0 |
| | | STEL | 3 mg/m3 | OSHA P0 |
| dioxosilane | 14808-60-7 | TWA (respir- able) | 10 mg/m3 / %SiO2+2 | OSHA Z-3 |
| | | TWA (respir- able) | 250 mppcf / %SiO2+5 | OSHA Z-3 |
| | | TWA (respir- | 0.1 mg/m3 | OSHA P0 |
| | | able dust fraction) | | |
| | | TWA (Res- pirable par- | 0.025 mg/m3 (Silica) | ACGIH |



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| | | | ticulate mat- ter) | | |
| | | | TWA (Res- pirable dust) | 0.05 mg/m3 (Silica) | NIOSH RE |
| | | | TWA (Res- pirable dust) | 0.05 mg/m3 | OSHA Z-1 |
| Engir | neering measures | CONTROL FOR THE PACKAGII APPLICAT | S/PERSONAL PRO MANUFACTURE, F NG OF THE PRODU | ENDATIONS FOR E DTECTION ARE INTE FORMULATION AND JCT. FOR COMMER -FARM APPLICATIO ABEL. | ENDED) RCIAL |
| | | protection The extent actual risk Maintain a standards. | measure if exposure t of these protection s in use. ir concentrations be | on is the most reliable e cannot be eliminate measures depends low occupational exp onal occupational hy | ed. on the posure |
| Perso | onal protective equip | ment | | | |
| Respi | ratory protection | : Where cor | acontrations are abo | ve recommended live | 14 |
| | | Follow OS use NIOSH by air purif hazardous supplied re release, ex | appropriate respirate HA respirator regula H/MSHA approved re ying respirators aga chemical is limited. espirator if there is a kposure levels are unce where air purifyi | we recommended lim ory protection should ations (29 CFR 1910. respirators. Protection ainst exposure to any Use a positive press any potential for unco inknown, or any other ng respirators may n | l be worn. 134) and n provided sure air ntrolled r |
| Hand | protection | Follow OS use NIOSH by air purif hazardous supplied re release, ex circumstar | appropriate respirate HA respirator regula H/MSHA approved re ying respirators aga chemical is limited. espirator if there is a kposure levels are unce where air purifyi | ory protection should ations (29 CFR 1910. respirators. Protection ainst exposure to any Use a positive press any potential for unco unknown, or any other | l be worn. 134) and n provided sure air ntrolled r |
| | | Follow OS use NIOSH by air purif hazardous supplied re release, ex circumstar adequate Wear prote does not of features at Please obs breakthroug gloves. Als conditions danger of through tir material, th has to be a discarded | appropriate respirate HA respirator regula H/MSHA approved re ying respirators aga chemical is limited. espirator if there is a xposure levels are un the where air purifying protection. ective gloves. The consider only depend on its me and is different from a serve the instruction righ time which are p so take into consider under which the pro- cuts, abrasion, and me depends amongs he thickness and the measured for each a | ory protection should ations (29 CFR 1910. respirators. Protection ainst exposure to any Use a positive press any potential for unco- unknown, or any other ng respirators may n choice of an appropria paterial but also on ot one producer to the of s regarding permeab provided by the suppl ration the specific loc poduct is used, such a the contact time. The st other things from the e type of glove and th case. Gloves should e is any indication of | I be worn. 134) and n provided sure air ntrolled r ot provide te glove her quality other. wility and ier of the cal s the be break he nerefore be |
| Re | protection | Follow OS use NIOSH by air purif hazardous supplied re release, ez circumstar adequate Wear prote does not of features a Please obs breakthrou gloves. Als conditions danger of through tir material, th has to be not discarded degradatio | appropriate respirate HA respirator regula H/MSHA approved re ying respirators aga chemical is limited. espirator if there is a kposure levels are un net where air purifying protection. ective gloves. The country protection. ective gloves. The country ective gloves. The country end is different from country ective gloves. The country ectiv | ory protection should ations (29 CFR 1910. respirators. Protection inst exposure to any . Use a positive press any potential for unco unknown, or any other ng respirators may n choice of an appropria taterial but also on ot one producer to the or is regarding permeab provided by the suppl ration the specific loc oduct is used, such a the contact time. The st other things from the e type of glove and th case. Gloves should the is any indication of athrough. | I be worn. 134) and n provided sure air ntrolled r ot provide te glove her quality other. wility and ier of the cal s the be break he nerefore be |



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| | | | concentration and amount of dangerous substances, and to the specific work-place. Remove and wash contaminated clothing before re-use. Wear as appropriate: Impervious clothing | | | |
| Prote | Protective measures | | The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. | | | |
| SECTION | N 9. PHYSICAL AND CH | EMI | CAL PROPERTIES | | | |
| Appe | earance | : | liquid | | | |
| Colo | r | : | white to light brown | | | |
| Odo | r | : | aromatic, like solvent | | | |
| Odo | r Threshold | : | No data available | | | |
| рH | | : | 4 - 8 Concentration: 1 %w/v | | | |
| Melt | ing point/range | : | No data available | | | |
| Boili | ng point/boiling range | : | No data available | | | |
| Flas | h point | : | Method: Pensky-Martens closed cup does not flash | | | |
| Evap | poration rate | : | No data available | | | |
| Flam | nmability (solid, gas) | : | No data available | | | |
| | er explosion limit / Upper mability limit | : | No data available | | | |
| | er explosion limit / Lower mability limit | : | No data available | | | |
| Vapo | or pressure | : | No data available | | | |
| Rela | tive vapor density | : | No data available | | | |
| Dens | sity | : | 1.047 g/cm3 | | | |
| | bility(ies) Vater solubility | : | completely miscible | | | |



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| | ion coefficient: n- ol/water | : No data available | |
| Autoig | gnition temperature | : 1175 °F / 635 °C | |
| Decor | mposition temperature | : No data available | |
| Viscosity Viscosity, dynamic | | : 79.5 - 448 mPa.s (68 °F / 20 °C) | |
| Vis | scosity, kinematic | 58.1 - 334 mPa.s (104 °F / 40 °C) : No data available | |
| | sive properties | : Not explosive | |
| Oxidiz | zing properties | : The substance or mixture is not classified as oxidizing. | |
| Partic | le size | : No data available | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | None reasonably foreseeable. |
|---|---|---|
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reac- tions | : | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | : | No decomposition if used as directed. |
| Incompatible materials | : | None known. |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

SECTION 11. TOXICOLOGICAL INFORMATION

| Information on likely route Ingestion Inhalation Skin contact Eye contact | es of exposure |
|---|---|
| Acute toxicity | |
| Product: Acute oral toxicity | : LD50 (Rat, male and female): > 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (Rat, male and female): > 4.62 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The component/mixture is moderately toxic after |
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| ATROL | | | | | |
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| | | | inhalation as o | alation., The substance/mixture is not toxic on lefined by dangerous goods regulations. ed on data from similar materials | |
| Acute | Acute dermal toxicity | | | le and female): > 4,000 mg/kg The substance or mixture has no acute dermal | |
| <u>Com</u> | ponents: | | | | |
| | da-cyhalothrin: e oral toxicity | : | LD50 (Rat, fer | nale): 56 mg/kg | |
| Acute | e inhalation toxicity | : | LC50 (Rat, ma Exposure time Test atmosphe | | |
| Acute | e dermal toxicity | : | LD50 (Rat, ma | ıle): 632 mg/kg | |
| Hydro | ocarbons, C9, Aroma | tics: | | | |
| - | e oral toxicity | : | LD50 (Rat, fer | nale): 3,492 mg/kg | |
| | phosphoric acid: e oral toxicity | : | LD50 (Rat): 30 |)1 ma/ka | |
| | e dermal toxicity | | LD50 (Rabbit): | | |
| 1 2-b | enzisothiazol-3(2H)-o | ne · | | | |
| | e oral toxicity | : | LD50 (Rat, ma | ıle): 670 mg/kg | |
| Acute | e dermal toxicity | : | | ile and female): > 2,000 mg/kg The substance or mixture has no acute dermal | |
| Skin | corrosion/irritation | | | | |
| Produ | uct: | | | | |
| Speci | | : | Rabbit | | |
| Resul Rema | | : | | nporary itching, tingling, burning or numbness of called paresthesia. | |
| <u>Com</u> p | <u>ponents:</u> | | | | |
| lamb | da-cyhalothrin: | | | | |
| Speci | | : | Rabbit | | |
| Resul Rema | | : | | on nporary itching, tingling, burning or numbness of called paresthesia. | |

Hydrocarbons, C9, Aromatics:



| PAIR | | | | | |
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| Resu | ult | : Repeated exposu | re may cause skin dryness or cracking. | | |
| Spec Rest | | : Rabbit : Mild skin irritation | | | |
| orth | ophosphoric acid: | | | | |
| Rest | ult | : Corrosive after 3 r | minutes to 1 hour of exposure | | |
| | penzisothiazol-3(2H)-o | 9: | | | |
| Spec Rest | | : Rabbit : Mild skin irritation | | | |
| Seri | ous eye damage/eye | ritation | | | |
| Proc | duct: | | | | |
| Spec Rest | | : Rabbit : No eye irritation | | | |
| Com | <u>iponents:</u> | | | | |
| | bda-cyhalothrin: | | | | |
| Spec Rest | | : Rabbit : No eye irritation | | | |
| 1,2-ł | penzisothiazol-3(2H)-o | 9: | | | |
| Spec Rest | | : Rabbit : Risk of serious da | mage to eyes. | | |
| Res | piratory or skin sensit | ation | | | |
| Proc | duct: | | | | |
| | Туре | : Maximization Test | t | | |
| Spec Rest | | : Guinea pig : Did not cause sen | sitization on laboratory animals. | | |
| Spec Rest | | : Humans : Probability or evide | ence of skin sensitization in humans | | |
| Com | <u>iponents:</u> | | | | |
| lam | bda-cyhalothrin: | | | | |
| | Туре | : Maximization Test | t | | |
| Spec Rest | | : Guinea pig : Does not cause sl | kin sensitization. | | |
| | Туре | : Local lymph node | assay (LLNA) | | |
| Spec Resi | | : Mouse : Does not cause sl | kin sensitization | | |
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| | 1,2-benzisoth | niazol-3(2H)-one | e: | | | | |
| | Result | | : | Probability or evid | lence of skin sensitization in humans | | |
| | Corm coll m | utogonioity | | | | | |
| | Germ cell m | | | | | | |
| | <u>Components</u> | _ | | | | | |
| | lambda-cyha | | | | | | |
| | Germ cell mu Assessment | tagenicity - | : | Animal testing did | I not show any mutagenic effects. | | |
| | | | | | | | |
| | orthophosph | oric acid: tagenicity - | | In vitro tests did r | ot show mutagenic effects | | |
| | Assessment | | • | | ior show mutagenic elects | | |
| | 1 0 hourieath | | | | | | |
| | Germ cell mu | niazol-3(2H)-one | e: : | Weight of evidence | e does not support classification as a germ | | |
| | Assessment | lagomenty | • | cell mutagen. | | | |
| | Carcinogeni | oity | | | | | |
| | - | - | | | | | |
| | <u>Components:</u> | | | | | | |
| | lambda-cyhalothrin: Carcinogenicity - Assess- | | | Woight of widow | e does not support classification as a car- | | |
| | ment | ly - A33633- | • | cinogen | | | |
| | | | | | | | |
| | dioxosilane: Carcinogenici | | | Weight of evidence | e does not support classification as a car- | | |
| | ment | ., | • | cinogen | | | |
| | | | | IARC has conclu | ded that there is sufficient evidence in hu- | | |
| | | | | | inogenicity of inhaled crystalline silica in the cristobalite from occupational sources and in | | |
| | | | | experimental anir | nals from quartz and cristobalite (Group 1). It | | |
| | | | | | er, that carcinogenicity was not detected in mstances and may be dependent on inher- | | |
| | | | | ent characteristic | s of the crystalline silica or external factors | | |
| | | | | affecting its biolog | gical activity. | | |
| | IARC | No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. | | | | | |
| | OSHA | | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. | | | | |
| | NTP | No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. | | | | | |

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| | Repro | ductive toxicity | | | |
| | <u>Compo</u> | onents: | | | |
| | lambda-cyhalothrin: Reproductive toxicity - As- : sessment | | : Weight of evidence does not support classification for reproductive toxicity | | |
| | - | hosphoric acid: uctive toxicity - As- ent | : No toxicity to reproduction | | |
| | STOT- | single exposure | | | |
| | <u>Compo</u> | onents: | | | |
| | | a-cyhalothrin: | | | |
| | Assess | sment | : The substance or mixture is not classified as specific target organ toxicant, single exposure. | | |
| | Hydrod | arbons, C9, Aromati | :s: | | |
| | Assess | sment | : The substance or mixture is classified as specific target orga toxicant, single exposure, category 3 with narcotic effects., The substance or mixture is classified as specific target orga toxicant, single exposure, category 3 with respiratory tract irritation. | | |
| | STOT- | repeated exposure | | | |
| | <u>Compo</u> | onents: | | | |
| | lambd Assess | a-cyhalothrin: sment | : The substance or mixture is not classified as specific target organ toxicant, repeated exposure. | | |
| | | of exposure Organs | Inhalation Lungs The substance or mixture is classified as specific target orga toxicant, repeated exposure, category 1. | an | |
| | Aspira | tion toxicity | | | |
| | <u>Compo</u> | onents: | | | |

Hydrocarbons, C9, Aromatics:

May be fatal if swallowed and enters airways.



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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

| lambda-cyhalothrin: | | |
|---|----|---|
| Toxicity to fish | : | LC50 (Leuciscus idus (Golden orfe)): 0.000078 mg/l Exposure time: 96 h |
| | | LC50 (Ictalurus punctatus (channel catfish)): 0.00016 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.00036 mg/l Exposure time: 48 h |
| | | LC50 (Americamysis): 0.000007 mg/l Exposure time: 48 h |
| | | EC50 (Hyalella azteca (Amphipod)): 0.000002 mg/l Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 0.31 mg/l Exposure time: 96 h |
| M-Factor (Acute aquatic tox- icity) | : | 100,000 |
| Toxicity to fish (Chronic tox- icity) | : | NOEC (Pimephales promelas (fathead minnow)): 0.000031 mg/l Exposure time: 300 d |
| Toxicity to daphnia and other aquatic invertebrates (Chron-ic toxicity) | : | NOEC (Daphnia magna (Water flea)): 0.000002 mg/l Exposure time: 21 d |
| | | NOEC (Americamysis): 0.00022 µg/l Exposure time: 28 d |
| M-Factor (Chronic aquatic toxicity) | : | 100,000 |
| Toxicity to microorganisms | : | EC50 (activated sludge): > 100 mg/l Exposure time: 3 h |
| Hydrocarbons, C9, Aromatic | s: | |
| Toxicity to fish | : | LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 h |
| Toxicity to algae/aquatic | : | ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2.9 |



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| plants | | | mg/I Exposure time: 72 | h | | | |
| | | | NOELR (Raphidoc 1.0 mg/l End point: Growth Exposure time: 72 | rate | ta (freshwater green | alga)): | |
| Toxicity icity) | to fish (Chronic tox- | : | NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 mg/l Exposure time: 28 d | | | | |
| | to daphnia and other invertebrates (Chron- ty) | : | NOELR (Daphnia Exposure time: 21 | | ⁻ flea)): 2.144 mg/l | | |
| | icology Assessment | | Tania ta amatia lif | | tion offersta | | |
| Chronic | aquatic toxicity | • | Toxic to aquatic life | e with long las | ting ellects. | | |
| - | nosphoric acid: | | | | | | |
| Toxicity | to fish | : | LC50 (Lepomis ma Exposure time: 96 | • | uegill sunfish)): 3 - 3 | .25 mg/ | |
| Ecotox | icology Assessment | | | | | | |
| Chronic | aquatic toxicity | : | This product has n | o known ecoto | oxicological effects. | | |
| 1,2-ben | zisothiazol-3(2H)-one | : | | | | | |
| Toxicity | to fish | : | LC50 (Oncorhynch Exposure time: 96 | | inbow trout)): 2.18 n | ng/l | |
| | to daphnia and other invertebrates | : | EC50 (Daphnia ma Exposure time: 48 | | ea)): 2.94 mg/l | | |
| Toxicity plants | to algae/aquatic | : | ErC50 (Raphidocel 0.15 mg/l Exposure time: 72 | | a (freshwater green a | alga)): | |
| | | | EC10 (Raphidoceli 0.04 mg/l End point: Growth Exposure time: 72 | rate | (freshwater green a | lga)): | |
| Toxicity icity) | to fish (Chronic tox- | : | NOEC (Oncorhync Exposure time: 28 | | ainbow trout)): 0.3 m | ng/I | |
| | to daphnia and other invertebrates (Chron- ty) | : | NOEC (Daphnia): Exposure time: 21 | | | | |



| PATRO |)L | | |
|------------------|---|-----------|---|
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| Persis | tence and degradab | ility | |
| <u>Comp</u> | onents: | | |
| | la-cyhalothrin: | | |
| Biodeg | gradability | : | Result: Not readily biodegradable. |
| Stabili | ty in water | : | Degradation half life (DT50): 7 d Remarks: Product is not persistent. |
| - | carbons, C9, Aromat gradability | ics: : | |
| | nzisothiazol-3(2H)-on gradability | ie: : | Result: rapidly degradable |
| Bioac | cumulative potential | | |
| <u>Comp</u> | onents: | | |
| lambo | la-cyhalothrin: | | |
| Bioaco | cumulation | : | Remarks: Bioaccumulates |
| | nzisothiazol-3(2H)-on cumulation | ie: : | Remarks: Bioaccumulation is unlikely. |
| Mobili | ty in soil | | |
| <u>Comp</u> | onents: | | |
| Distrib | la-cyhalothrin: ution among environ- compartments | : | Remarks: immobile |
| Stabili | ty in soil | : | Dissipation time: 56 d Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent. |
| Other | adverse effects | | |
| <u>Comp</u> | onents: | | |
| lambo | la-cyhalothrin: | | |
| Result assess | s of PBT and vPvB sment | : | This substance is not considered to be persistent, bioaccumu- lating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB). |
| orthop | phosphoric acid: | | |
| Result assess | s of PBT and vPvB sment | : | This substance is not considered to be persistent, bioaccumu- lating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB). |



| ersion 1 | Revision Date: 04/04/2023 | SDS Number: S1421013872 | This version replaces all previous versions. |
|---------------------------------------|------------------------------|----------------------------|---|
| 1,2-b | enzisothiazol-3(2H)-o | ne: | |
| Results of PBT and vPvB assessment | | lating and tox | ce is not considered to be persistent, bioaccumu ic (PBT). This substance is not considered to be nt and very bioaccumulating (vPvB). |
| | 13. DISPOSAL CONS | SIDERATIONS | |
| | | | |

| Contaminated packaging | : | Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. |
|------------------------|---|---|
|------------------------|---|---|

SECTION 14. TRANSPORT INFORMATION

International Regulations

| UNRTDG | | |
|---|---|--|
| UN number | : | UN 3082 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LAMBDA-CYHALOTHRIN) |
| Class | : | 9 |
| Packing group | : | |
| Labels | : | 9 |
| IATA-DGR | | |
| UN/ID No. | : | UN 3082 |
| Proper shipping name | : | Environmentally hazardous substance, liquid, n.o.s. (LAMBDA-CYHALOTHRIN) |
| Class | : | 9 |
| Packing group | : | |
| Labels | : | Miscellaneous |
| Packing instruction (cargo aircraft) | : | 964 |
| Packing instruction (passen- ger aircraft) | : | 964 |
| Environmentally hazardous | : | yes |
| IMDG-Code | | |
| UN number | : | UN 3082 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, |
| | | N.O.S. |
| | | (LAMBDA-CYHALOTHRIN) |
| Class | : | 9 |
| | | 15 / 18 |



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| Packi | ng group | : III | |
| Labels | s | : 9 | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

F-A, S-F

yes

:

Not applicable for product as supplied.

Domestic regulation

49 CFR

EmS Code

Marine pollutant

Not regulated as a dangerous good Remarks : S

Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

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

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: Caution

Harmful if absorbed through skin.

Avoid breathing spray mist.

Avoid contact with skin, eyes or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove and wash contaminated clothing before re-use.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

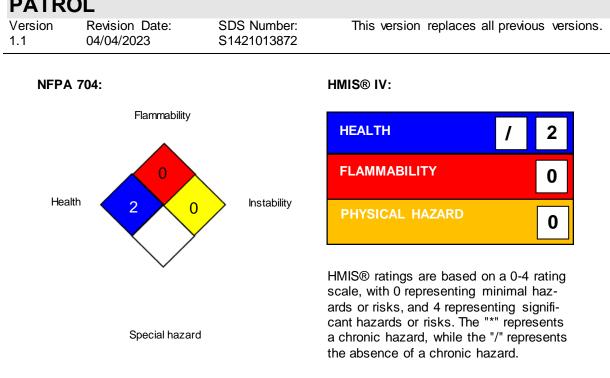
This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | Acute toxicity (any route of exposure) Respiratory or skin sensitization |
|----------------------|---|---|
| SARA 313 | : | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |

SECTION 16. OTHER INFORMATION

Further information





Full text of other abbreviations

| ACGIH NIOSH REL OSHA P0 | : | USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
|-------------------------------|---|--|
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts |
| US WEEL | : | USA. Workplace Environmental Exposure Levels (WEEL) |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| ACGIH / STEL | : | Short-term exposure limit |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST | : | STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday |
| OSHA P0/TWA | : | 8-hour time weighted average |
| OSHA P0/STEL | : | Short-term exposure limit |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-3 / TWA | : | 8-hour time weighted average |
| US WEEL / TWA | : | 8-hr TWA |

AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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 Dan-



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gerous 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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: RCRA - Resource Conservation and Recovery Act: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity: SADT - Self-Accelerating Decomposition Temperature: SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date

04/04/2023

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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