# PRIME + EC

| Version | Revision Date: | SDS Number: | Date of last issue: 11/28/2017 |
|---|---|---|---|
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## SECTION 1. IDENTIFICATION

Product name : PRIME + EC
Design code : A6623C

Product Registration number : 100-640

**Manufacturer or supplier's details**

Company name of supplier : Syngenta Crop Protection, LLC
Address : Post Office Box 18300
Greensboro NC 27419
United States of America (USA)

Telephone : 1 800 334 9481
Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com
Emergency telephone : 1 800 888 8372

**Recommended use of the chemical and restrictions on use**

Recommended use : Plant growth regulator

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Flammable liquids : Category 3

Serious eye damage : Category 1

Skin sensitization : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

Specific target organ toxicity - repeated exposure : Category 2 (Central nervous system, Kidney, Liver, hearing organs)

Aspiration hazard : Category 1

**GHS label elements**

Hazard pictograms :

Signal Word : Danger

Hazard Statements :
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs (Central nervous system, Kidney, Liver, hearing organs) through prolonged or repeated exposure.

Precautionary Statements :

**Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe mist or vapors.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

**Disposal:**

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

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified | 64742-95-6 | >= 50 - < 70 |
| 1,2,4-trimethylbenzene | 95-63-6 | >= 20 - < 30 |
| xylene | 1330-20-7 | >= 10 - < 20 |
| flumetralin (ISO) | 62924-70-3 | 13.8462 |
| poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy- | 9036-19-5 | >= 10 - < 20 |
| ethylbenzene | 100-41-4 | >= 5 - < 10 |
| calcium bis(dodecylbenzenesulphonate), branched | 68953-96-8 | >= 1 - < 5 |
| 2-ethylhexan-1-ol | 104-76-7 | >= 1 - < 5 |
| toluene | 108-88-3 | >= 0.1 - < 1 |

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.

If inhaled : Take the victim into fresh air.
If breathing is irregular or stopped, administer artificial respiration.

| | | |
|---|---|---|
| | | Keep patient warm and at rest.<br>Call a physician or poison control center immediately. |
| In case of skin contact | : | Take off all contaminated clothing immediately.<br>Wash off immediately with plenty of water.<br>If skin irritation persists, call a physician.<br>Wash contaminated clothing before re-use. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>Remove contact lenses.<br>Immediate medical attention is required. |
| If swallowed | : | If swallowed, seek medical advice immediately and show this container or label.<br>Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. |
| Most important symptoms and effects, both acute and delayed | : | Aspiration may cause pulmonary edema and pneumonitis.<br>May be fatal if swallowed and enters airways.<br>May cause an allergic skin reaction.<br>Causes serious eye damage.<br>May cause respiratory irritation.<br>Suspected of causing cancer.<br>Suspected of damaging fertility. Suspected of damaging the unborn child.<br>May cause damage to organs through prolonged or repeated exposure. |
| Notes to physician | : | There is no specific antidote available.<br>Treat symptomatically.<br>Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Extinguishing media - small fires<br>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.<br>Extinguishing media - large fires<br>Alcohol-resistant foam |
| Unsuitable extinguishing media | : | Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards during fire fighting | : | As the product contains combustible organic ingredients, fire will produce dense black smoke containing hazardous products of combustion (see section 10).<br>Exposure to decomposition products may be a hazard to health.<br>Flash back possible over considerable distance. |
| Hazardous combustion products | : | Carbon oxides<br>Nitrogen oxides (NOx)<br>Chlorine compounds<br>Fluorine compounds<br>Sulfur oxides |

| | | |
|---|---|---|
| Further information | : | Do not allow run-off from fire fighting to enter drains or water courses.<br>Cool closed containers exposed to fire with water spray. |
| Special protective equipment for fire-fighters | : | Wear full protective clothing and self-contained breathing apparatus. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Refer to protective measures listed in sections 7 and 8.<br>Keep people away from and upwind of spill/leak.<br>Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.<br>Remove all sources of ignition.<br>Pay attention to flashback. |
| Environmental precautions | : | Prevent further leakage or spillage if safe to do so.<br>Do not flush into surface water or sanitary sewer system.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).<br>Clean contaminated surface thoroughly.<br>Clean with detergents. Avoid solvents.<br>Retain and dispose of contaminated wash water. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Avoid contact with skin and eyes.<br>When using do not eat, drink or smoke.<br>Use only in an area containing flame proof equipment.<br>Take precautionary measures against static discharges.<br>For personal protection see section 8. |
| Conditions for safe storage | : | Keep containers tightly closed in a dry, cool and well-ventilated place.<br>Keep out of the reach of children.<br>Keep away from combustible material.<br>Keep in an area equipped with sprinklers.<br>Keep away from food, drink and animal feedingstuffs.<br>No smoking. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified | 64742-95-6 | TWA | 500 ppm<br>2,000 mg/m3 | OSHA Z-1 |
| | | TWA | 200 mg/m3<br>(total hydrocarbon vapor) | ACGIH |
| 1,2,4-trimethylbenzene | 95-63-6 | TWA | 25 ppm<br>125 mg/m3 | NIOSH REL |
| | | TWA | 25 ppm | ACGIH |
| | | TWA | 25 ppm<br>125 mg/m3 | OSHA P0 |
| | | TWA | 10 ppm | ACGIH |
| xylene | 1330-20-7 | TWA | 100 ppm<br>435 mg/m3 | OSHA Z-1 |
| | | TWA | 20 ppm | ACGIH |
| | | STEL | 150 ppm<br>655 mg/m3 | OSHA P0 |
| | | TWA | 100 ppm<br>435 mg/m3 | OSHA P0 |
| flumetralin (ISO) | 62924-70-3 | TWA | 5 mg/m3 | Syngenta |
| poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy- | 9036-19-5 | TWA | 10 mg/m3 | Supplier |
| ethylbenzene | 100-41-4 | TWA | 20 ppm | ACGIH |
| | | TWA | 100 ppm<br>435 mg/m3 | NIOSH REL |
| | | ST | 125 ppm<br>545 mg/m3 | NIOSH REL |
| | | TWA | 100 ppm<br>435 mg/m3 | OSHA Z-1 |
| | | TWA | 100 ppm<br>435 mg/m3 | OSHA P0 |
| | | STEL | 125 ppm<br>545 mg/m3 | OSHA P0 |
| 2-ethylhexan-1-ol | 104-76-7 | TWA | 5 ppm | ACGIH |
| toluene | 108-88-3 | TWA | 20 ppm | ACGIH |
| | | TWA | 100 ppm<br>375 mg/m3 | NIOSH REL |
| | | ST | 150 ppm<br>560 mg/m3 | NIOSH REL |
| | | TWA | 200 ppm | OSHA Z-2 |
| | | CEIL | 300 ppm | OSHA Z-2 |
| | | Peak | 500 ppm<br>(10 minutes) | OSHA Z-2 |
| | | TWA | 100 ppm<br>375 mg/m3 | OSHA P0 |
| | | STEL | 150 ppm<br>560 mg/m3 | OSHA P0 |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---|---|---|---|---|---|---|
| xylene | 1330-20-7 | Methylhippuric 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 |
| toluene | 108-88-3 | Toluene | In blood | Prior to last shift of workweek | 0.02 mg/l | ACGIH BEI |
| | | Toluene | Urine | End of shift (As soon as possible after exposure ceases) | 0.03 mg/l | ACGIH BEI |
| | | o-Cresol | Urine | End of shift (As soon as possible after exposure ceases) | 0.3 mg/g creatinine | ACGIH BEI |

**Engineering measures** : THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

**Personal protective equipment**

Respiratory protection : Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.
Tightly fitting safety goggles
Face-shield

Skin and body protection : Choose body protection in relation to its type, to the 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

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 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : No data available

Odor : No data available

| | | |
|---|---|---|
| Odor Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | 106 °F / 41 °C<br>Method: Pensky-Martens closed cup |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Density | : | 1.04 g/cm3 (77 °F / 25 °C) |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | 698 °F / 370 °C |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | 2.17 mPa.s (68 °F / 20 °C)<br>1.49 mPa.s (104 °F / 40 °C) |
| Viscosity, kinematic | : | No data available |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |

Particle characteristics
Particle size : No data available

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | None reasonably foreseeable. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | 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 routes of exposure**

Ingestion
Inhalation
Skin contact
Eye contact

**Acute toxicity**

Based on available data, the classification criteria are not met.

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, female): 4,130 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 2.36 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rabbit, male and female): 2,010 mg/kg |

**Components:**

**1,2,4-trimethylbenzene:**

| | | |
|---|---|---|
| Acute inhalation toxicity | : | Assessment: The component/mixture is moderately toxic after short term inhalation. |

**xylene:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, female): 3,523 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): 27.124 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapor |
| Acute dermal toxicity | : | LD50 (Rabbit): 12,126 mg/kg |

**flumetralin (ISO):**

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.41 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

LD50 (Rabbit, male and female): > 2,000 mg/kg
Assessment: The component/mixture is minimally toxic after single contact with skin.

**poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Acute oral toxicity : LD50 (Rat): 1,900 - 5,000 mg/kg

**ethylbenzene:**

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after short term inhalation.

**calcium bis(dodecylbenzenesulphonate), branched:**

Acute dermal toxicity : LD50 (Rat, male and female): > 1,000 - 1,600 mg/kg

**2-ethylhexan-1-ol:**

Acute oral toxicity : LD50 (Rat): 2,047 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.89 - 5.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 3,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

**toluene:**

Acute oral toxicity : LD50 (Rat, male): 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 25.7 mg/l
Exposure time: 4 h

Test atmosphere: vapor
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male): > 5,000 mg/kg

**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

**Product:**

Species : Rabbit
Result : Mild skin irritation

**Components:**

**1,2,4-trimethylbenzene:**

Result : Irritating to skin.

**xylene:**

Species : Rabbit
Result : Irritating to skin.

**flumetralin (ISO):**

Species : Rabbit
Result : No skin irritation

**calcium bis(dodecylbenzenesulphonate), branched:**

Result : Irritating to skin.

**2-ethylhexan-1-ol:**

Species : Rabbit
Result : Irritating to skin.

**toluene:**

Species : Rabbit
Result : Irritating to skin.

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Product:**

Species : Rabbit
Result : Irreversible effects on the eye

**Components:**

**1,2,4-trimethylbenzene:**

Result : Eye irritation

**xylene:**

Species : Rabbit
Result : Eye irritation

**flumetralin (ISO):**

Species : Rabbit
Result : No eye irritation

**poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Result : Risk of serious damage to eyes.

**calcium bis(dodecylbenzenesulphonate), branched:**

Result : Risk of serious damage to eyes.

**2-ethylhexan-1-ol:**

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

**toluene:**

Species : Rabbit
Result : No eye irritation

**Respiratory or skin sensitization**

**Skin sensitization**

May cause an allergic skin reaction.

**Respiratory sensitization**

Not classified due to lack of data.

**Product:**

Species : Guinea pig
Result : May cause sensitization by skin contact.

**Components:**

**xylene:**

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Result : Not a skin sensitizer.

**flumetralin (ISO):**

Test Type : Local lymph node assay (LLNA)
Result : Does not cause skin sensitization.

**2-ethylhexan-1-ol:**

Species : Humans
Result : Not a skin sensitizer.

**toluene:**

Species : Guinea pig
Result : Does not cause skin sensitization.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Components:**

**xylene:**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**flumetralin (ISO):**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**2-ethylhexan-1-ol:**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**toluene:**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Carcinogenicity**

Suspected of causing cancer.

**Components:**

**xylene:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**flumetralin (ISO):**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**2-ethylhexan-1-ol:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**toluene:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**IARC** Group 2B: Possibly carcinogenic to humans
ethylbenzene 100-41-4

**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.

**Reproductive toxicity**

Suspected of damaging fertility. Suspected of damaging the unborn child.

**Components:**

**xylene:**

Reproductive toxicity - Assessment : No toxicity to reproduction, No effects on or via lactation

**flumetralin (ISO):**

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

**2-ethylhexan-1-ol:**

Reproductive toxicity - Assessment : No toxicity to reproduction, No effects on or via lactation

**toluene:**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

**STOT-single exposure**

May cause respiratory irritation.

**Components:**

**1,2,4-trimethylbenzene:**

Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**xylene:**

Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**2-ethylhexan-1-ol:**

Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**toluene:**

| | | |
|---|---|---|
| Routes of exposure | : | Inhalation |
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. |

**STOT-repeated exposure**

May cause damage to organs (Central nervous system, Kidney, Liver, hearing organs) through prolonged or repeated exposure.

**Components:**

**xylene:**

| | | |
|---|---|---|
| Target Organs | : | Central nervous system, Kidney, Liver |
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2. |

**flumetralin (ISO):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |

**ethylbenzene:**

| | | |
|---|---|---|
| Target Organs | : | hearing organs |
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2. |

**2-ethylhexan-1-ol:**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |

**toluene:**

| | | |
|---|---|---|
| Routes of exposure | : | Inhalation |
| Target Organs | : | Central nervous system |
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2. |

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**Components:**

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

May be fatal if swallowed and enters airways.

**1,2,4-trimethylbenzene:**

May be fatal if swallowed and enters airways.

**xylene:**
May be fatal if swallowed and enters airways.

**ethylbenzene:**
May be fatal if swallowed and enters airways.

**toluene:**
May be fatal if swallowed and enters airways.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Product:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 6.26 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 27.7 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | ErC50 (Navicula pelliculosa (Freshwater diatom)): 0.0254 mg/l<br>Exposure time: 72 h<br><br>NOEC (Navicula pelliculosa (Freshwater diatom)): 0.01 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br><br>ErC50 (Raphidocelis subcapitata (freshwater green alga)): 25 mg/l<br>Exposure time: 72 h<br><br>NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.097 mg/l<br>End point: Growth rate<br>Exposure time: 72 h |

**Components:**

**1,2,4-trimethylbenzene:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 7.72 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 3.6 mg/l<br>Exposure time: 48 h |

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Chronic aquatic toxicity | : | Toxic to aquatic life with long lasting effects. |

**xylene:**

| | | |
|---|---|---|
| Toxicity to algae/aquatic plants | : | EC50: 2.2 mg/l<br>Exposure time: 72 h<br><br>NOEC: 0.44 mg/l<br>Exposure time: 72 h |

**flumetralin (ISO):**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.023 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | LC50 (Americamysis): 0.094 mg/l<br>Exposure time: 96 h<br><br>EC50 (Daphnia magna (Water flea)): > 0.16 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | ErC50 (Skeletonema costatum (marine diatom)): 0.000135 mg/l<br>Exposure time: 96 h<br><br>EC10 (Skeletonema costatum (marine diatom)): 0.000047 mg/l<br>End point: Growth rate<br>Exposure time: 96 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Pimephales promelas (fathead minnow)): > 0.0011 - < 0.0023 mg/l<br>Exposure time: 38 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): > 0.0088 mg/l<br>Exposure time: 21 d |

**poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 4 - 8.9 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 18 - 26 mg/l<br>Exposure time: 48 h |
| Toxicity to microorganisms | : | IC50 (Bacteria): 5,000 mg/l<br>Exposure time: 16 h |

**ethylbenzene:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Marine species): 5.1 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Mysidopsis bahia (opossum shrimp)): 2.6 mg/l<br>Exposure time: 96 h |

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Ceriodaphnia dubia (Water flea)): 0.96 mg/l<br>Exposure time: 7 d |

**calcium bis(dodecylbenzenesulphonate), branched:**

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Chronic aquatic toxicity | : | Toxic to aquatic life with long lasting effects. |

**2-ethylhexan-1-ol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Leuciscus idus (Golden orfe)): 17.1 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 39 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): 16.6 mg/l<br>Exposure time: 72 h |
| | | EC10 (Desmodesmus subspicatus (green algae)): 5.3 mg/l<br>Exposure time: 72 h |
| Toxicity to fish (Chronic toxicity) | : | EC10 (Danio rerio (zebra fish)): 0.28 mg/l<br>Exposure time: 35 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | EC10 (Daphnia magna (Water flea)): 1.5 mg/l |

**toluene:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l<br>Exposure time: 48 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l<br>Exposure time: 40 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Ceriodaphnia dubia (Water flea)): 0.74 mg/l<br>Exposure time: 7 d |

**Persistence and degradability**

**Components:**

**xylene:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable. |

**flumetralin (ISO):**

| | | |
|---|---|---|
| Biodegradability | : | Result: Not readily biodegradable. |

Stability in water : Remarks: Product is not persistent.

**poly(oxy-1,2-ethanediyl), alpha-[4-(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Biodegradability : Result: Readily biodegradable.

**ethylbenzene:**

Biodegradability : Result: Readily biodegradable.

**2-ethylhexan-1-ol:**

Biodegradability : Result: Readily biodegradable.

**toluene:**

Biodegradability : Result: Readily biodegradable.

**Bioaccumulative potential**

**Components:**

**flumetralin (ISO):**

Bioaccumulation : Remarks: Bioaccumulates

Partition coefficient: n-octanol/water : log Pow: 5.53 (77 °F / 25 °C)

**toluene:**

Bioaccumulation : Remarks: Does not bioaccumulate.

**Mobility in soil**

**Components:**

**flumetralin (ISO):**

Distribution among environmental compartments : Remarks: immobile

Stability in soil : Remarks: Product is not persistent.

**Other adverse effects**

**Components:**

**2-ethylhexan-1-ol:**

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).

**toluene:**

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste Code | : | D001: Ignitability |
| Waste from residues | : | Do not contaminate ponds, waterways or ditches with chemical or used container.<br>Do not dispose of waste into sewer.<br>Where possible recycling is preferred to disposal or incineration.<br>If recycling is not practicable, dispose of in compliance with local regulations.<br>This product will be a RCRA characteristic hazardous waste when discarded. Please see section 15 for applicable CERCLA reportable quantities |
| Contaminated packaging | : | Empty remaining contents.<br>Triple rinse containers.<br>Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>Do not re-use empty containers. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**UNRTDG**

| | | |
|---|---|---|
| UN number | : | UN 1993 |
| Proper shipping name | : | FLAMMABLE LIQUID, N.O.S. (PSEUDOCUMENE, XYLENES) |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | 3 |
| Environmentally hazardous | : | yes |

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 1993 |
| Proper shipping name | : | Flammable liquid, n.o.s. (PSEUDOCUMENE, XYLENES) |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | Flammable Liquids |
| Packing instruction (cargo aircraft) | : | 366 |
| Packing instruction (passenger aircraft) | : | 355 |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 1993 |
| Proper shipping name | : | FLAMMABLE LIQUID, N.O.S. (PSEUDOCUMENE, XYLENES) |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | 3 |

| | | |
|---|---|---|
| EmS Code | : | F-E, S-E |
| Marine pollutant | : | yes |

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

Not applicable for product as supplied.

**Domestic regulation**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | UN 1993 |
| Proper shipping name | : | Flammable liquids, n.o.s. (PSEUDOCUMENE, XYLENES) |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | FLAMMABLE LIQUID |
| ERG Code | : | 128 |
| Marine pollutant | : | no |

**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:
Danger
Corrosive
Causes irreversible eye damage.
Do not get in eyes, on skin, or on clothing.
Wear protective eyewear, goggles, or face shields.
Causes skin irritation.
Avoid contact with skin, eyes or clothing.
Harmful if swallowed.
Harmful if absorbed through skin.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
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.

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| xylene | 1330-20-7 | 100 | 557 |

A characteristic waste RQ of 100 lbs applies to this product in a waste form: D001

**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** : Flammable (gases, aerosols, liquids, or solids)
Respiratory or skin sensitization
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Serious eye damage or eye irritation

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| 1,2,4-trimethylbenzene | 95-63-6 | >= 20 - < 30 % |
| xylene | 1330-20-7 | >= 10 - < 20 % |
| ethylbenzene | 100-41-4 | >= 5 - < 10 % |

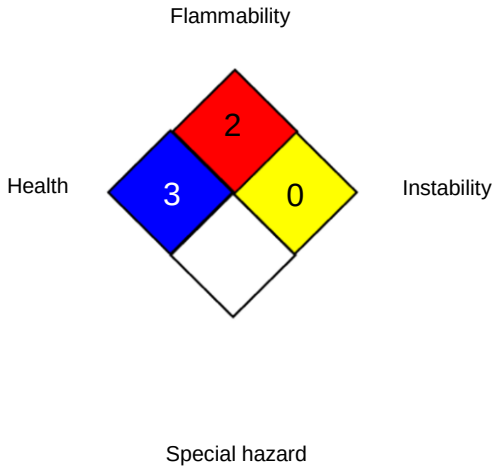
**California Prop. 65**

WARNING: This product can expose you to chemicals including ethylbenzene, which is/are known to the State of California to cause cancer, and
toluene, which is/are known to the State of California to cause birth defects or other reproductive harm.
For more information go to www.P65Warnings.ca.gov.

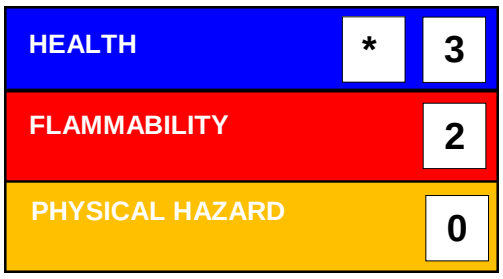
## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA 704:**




**HMIS® IV:**




HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH BEI | : | ACGIH - Biological Exposure Indices (BEI) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| OSHA Z-2 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| Syngenta | : | Syngenta Occupational Exposure Limits |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| 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-2 / TWA | : | 8-hour time weighted average |
| OSHA Z-2 / CEIL | : | Acceptable ceiling concentration |
| OSHA Z-2 / Peak | : | Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift |
| Syngenta / TWA | : | Time weighted average |

AIIC - 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 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; 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 Con-

trol Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 05/06/2025

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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