Section Headings

**TitlesSAFETY DATA SHEET**

**NameDOW AGROSCIENCES S.A.S.**



1/10/18; BK – D81577

12/19/17; BK – INC1221350

12/18/17; BK – D79327

12/6/17; BK – INC1136996

12/4/17; BK – INC1136996

11/6/17; BK – D76181

11/3/17; BK – Lion

10/27/17; BK – D72771

1/10/18; BK – D81577

12/19/17; BK – INC1221350

12/18/17; BK – D79327

12/6/17; BK – INC1136996

12/4/17; BK - INC1136996

11/06/17; BK – D76181

11/03/17; BK – Lion

10/27/17; BK – D72771

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|  |  |
| --- | --- |
| **Product name:**  **DURSBAN™ 5G Insecticide** | **Issue Date:** 03/05/2018 |
| **Print Date:** 05/29/2019 | |

DOW AGROSCIENCES S.A.S. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.\_

\_

**1. PRODUCT AND COMPANY IDENTIFICATION\_**

**Product name:** DURSBAN™ 5G Insecticide\_

**\_**

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

**Identified uses:** Plant Protection Product Insecticide \_

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**COMPANY IDENTIFICATION**\_

DOW AGROSCIENCES S.A.S.\_

IMMEUBLE LE CAMPUS\_

6, RUE JEAN PIERRE TIMBAUD\_

78180 MONTIGNY LE BRETONNEUX\_

FRANCE\_

\_

|  |  |
| --- | --- |
| **Customer Information Number:** | (0) 493 95 60 00\_  SDSQuestion@dow.com |

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**Emergency telephone number**\_

**24-Hour Emergency Contact:** 0033 388 736 000\_

**Local Emergency Contact:** 00 31 115 69 4982\_

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**2. HAZARDS IDENTIFICATION\_**

11/3/17; BK - Lion

6/1/17; BK – Type of Substance

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**Classification of the substance or mixture**\_

Acute aquatic toxicity - Category 1 - H400\_

Chronic aquatic toxicity - Category 1 - H410\_

For the full text of the H-Statements mentioned in this Section, see Section 16.\_

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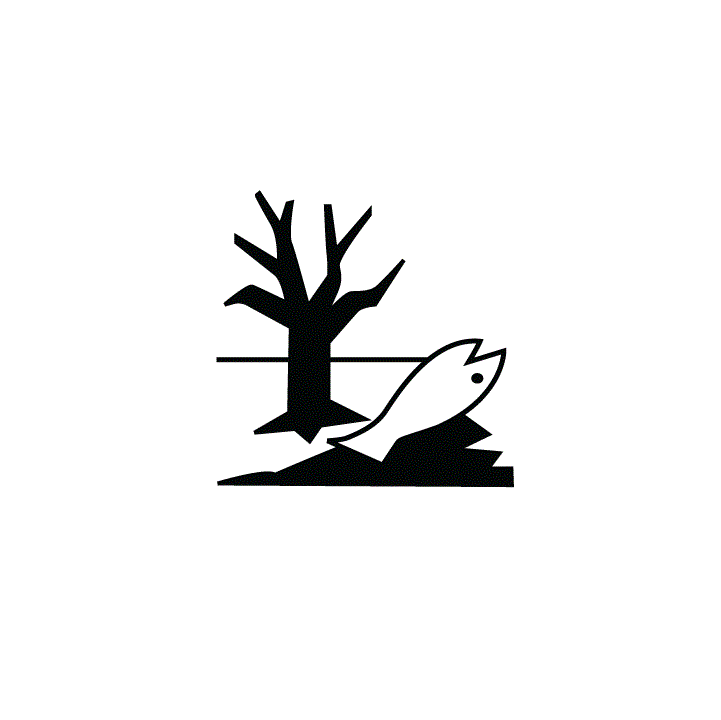
**Label elements**\_

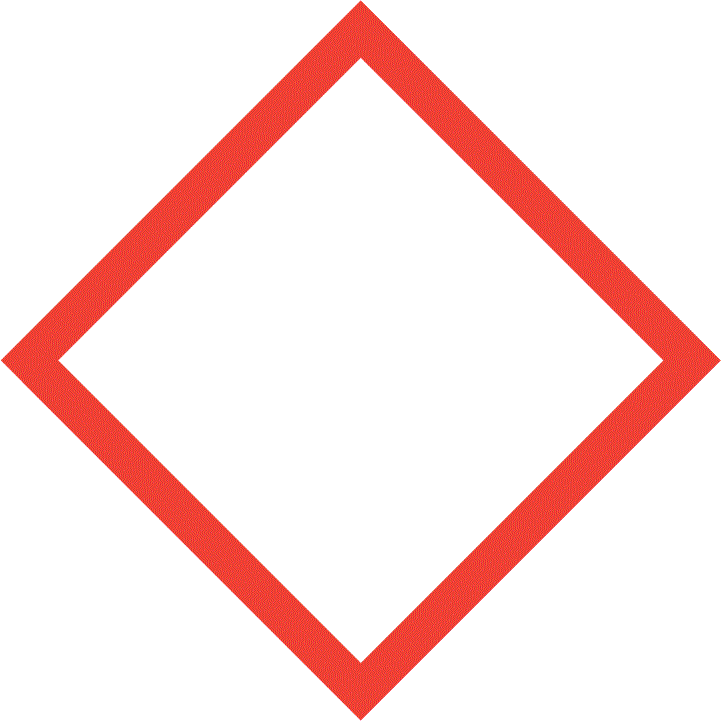
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**Hazard pictograms**\_

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**Signal word: Warning**\_

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**Hazard statements**\_

|  |  |
| --- | --- |
| H410 | Very toxic to aquatic life with long lasting effects. |

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**Precautionary statements**\_

|  |  |
| --- | --- |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/container in accordance with applicable regulations. |

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**Supplemental information**\_

|  |  |
| --- | --- |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |

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**Other hazards**\_

No data available\_

**3. COMPOSITION/INFORMATION ON INGREDIENTS\_**

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This product is a mixture.\_

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN / \_**  **EC-No. / \_**  **Index-No.** | **Concentration** | **Component** | **Classification** |

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN**\_  2921-88-2\_  **EC-No.**\_  220-864-4\_  **Index-No.**\_  015-084-00-4 | 5.0% | Chlorpyrifos | Acute Tox. - 3 - H301\_  Aquatic Acute - 1 - H400\_  Aquatic Chronic - 1 - H410\_ |

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN**\_  12001-26-2\_  **EC-No.**\_  Not available\_  **Index-No.**\_  – | > 20.0 - < 30.0 % | Mica-group minerals | Not classified |

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN**\_  12174-11-7\_  **EC-No.**\_  –\_  **Index-No.**\_  – | > 20.0 - < 30.0 % | Hydrated aluminum-magnesium silicate | Not classified |

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN**\_  1317-65-3\_  **EC-No.**\_  215-279-6\_  **Index-No.**\_  – | > 20.0 - < 30.0 % | Limestone | Not classified |

|  |  |  |  |
| --- | --- | --- | --- |
| **CASRN**\_  25322-69-4\_  **EC-No.**\_  Polymer\_  **Index-No.**\_  – | < 10.0 % | Polypropylene glycol | Acute Tox. - 4 - H302\_ |

For the full text of the H-Statements mentioned in this Section, see Section 16.\_

\_

**4. FIRST AID MEASURES\_**

**Description of first aid measures**\_

**General advice** **:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment. \_

\_

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel. \_

\_

**Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. \_

\_

**Eye contact:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area. \_

\_

**Ingestion:** Do not induce vomiting. Call a physician and/or transport to emergency facility immediately. \_

\_

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.\_

\_

**Indication of any immediate medical attention and special treatment needed**\_

**Notes to physician**:Maintain adequate ventilation and oxygenation of the patient. Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. Attempt seizure control with diazepam 5-10 mg (adults) intravenous over 2-3 minutes. Repeat every 5-10 minutes as needed. Monitorfor hypotension, respiratory depression, and need for intubation. Consider second agent if seizures persist after 30 mg. If seizures persist or recur administer phenobarbital 600-1200 mg (adults) intravenous diluted in 60 ml 0.9% saline given at 25-50 mg/minute. Evaluate for hypoxia, dysrhythmia, electrolyte disturbance, hypoglycemia (treat adults with dextrose 100 mg intravenous). If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment. \_

\_

**5. FIREFIGHTING MEASURES\_**

**Suitable extinguishing media:** Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. \_

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**Unsuitable extinguishing media:**

No data available\_

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**Special hazards arising from the substance or mixture**\_

**Hazardous combustion products:**

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Oxides of potassium. Combustion products may include trace amounts of: Phosphorus oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide. \_

\_

**Unusual Fire and Explosion Hazards:** Container may vent and/or rupture due to fire. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is emitted when burned without sufficient oxygen. \_

\_

**Advice for firefighters**\_

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS. \_

\_

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance. \_

\_

**6. ACCIDENTAL RELEASE MEASURES\_**

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

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**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms. \_

\_

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information. \_

\_

**7. Handling and storage\_**

**Precautions for safe handling:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or mist. Avoid breathing vapor. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Good housekeeping and controlling of dusts are necessary for safe handling of product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION. \_

\_

**Conditions for safe storage:** Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies. \_

\_

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION\_**

**Control parameters**\_

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.\_

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Regulation** | **Type of listing** | **Value/Notation** |

|  |  |  |  |
| --- | --- | --- | --- |
| Chlorpyrifos | ACGIH | TWA Inhalable fraction and vapor | 0.1 mg/m3 |
|  | ACGIH | TWA | SKIN, BEI |

|  |  |  |  |
| --- | --- | --- | --- |
| Mica-group minerals | ACGIH | TWA Respirable fraction | 3 mg/m3 |

|  |  |  |  |
| --- | --- | --- | --- |
| Limestone | Dow IHG | TWA | 1 mg/m3 |

|  |  |  |  |
| --- | --- | --- | --- |
| Polypropylene glycol | US WEEL | TWA aerosol | 10 mg/m3 |

\_

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING. \_

\_

Biological occupational exposure limits

| **Components** | **CAS-No.** | **Control parameters** | **Biological specimen** | **Sampling time** | **Permissible concentration** | **Basis** |
| --- | --- | --- | --- | --- | --- | --- |

]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Chlorpyrifos | 2921-88-2 | cholinesterase (red blood cells) | Blood |  | 80 % of an individual's baseline | IL BEI |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | cholinesterase (red blood cells) | Blood |  | 70 % of an individual's baseline | IL BEI |

\_

**Exposure controls**\_

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. \_

\_

**Individual protection measures**\_

**Eye/face protection:** Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. \_

**Skin protection**\_

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. \_

**Other protection:** No precautions other than clean body-covering clothing should be needed. \_

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. \_

Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2. \_

\_

**See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.**\_

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**9. PHYSICAL AND CHEMICAL PROPERTIES\_**

**Appearance**

|  |  |
| --- | --- |
| **Physical state** | Granules. |

|  |  |
| --- | --- |
| **Color** | Brown |

|  |  |
| --- | --- |
| **Odor** | No test data available |

|  |  |
| --- | --- |
| **Odor Threshold** | No test data available |

|  |  |
| --- | --- |
| **pH** | No test data available |
| **Melting point/range** | No test data available |
| **Freezing point** | Not applicable |

|  |  |
| --- | --- |
| **Boiling point (760 mmHg)** | Not applicable |

|  |  |
| --- | --- |
| [**Flash point**] | **closed cup** Not applicable |

|  |  |
| --- | --- |
| **Evaporation Rate (Butyl Acetate = 1)** | Not applicable |

|  |  |
| --- | --- |
| **Flammability (solid, gas)** | No *Flammability (solids)* |

|  |  |
| --- | --- |
| **Lower explosion limit** | Not applicable |

|  |  |
| --- | --- |
| **Upper explosion limit** | Not applicable |

|  |  |
| --- | --- |
| **Vapor Pressure** | Not applicable |

|  |  |
| --- | --- |
| **Relative Vapor Density (air = 1)** | Not applicable |

|  |  |
| --- | --- |
| **Relative Density (water = 1)** | 2.429 at 20 °C / 4 °C *EC Method A3* |
| **Water solubility** | No test data available |

|  |  |
| --- | --- |
| **Partition coefficient: n-octanol/water** | No data available |

|  |  |
| --- | --- |
| **Auto-ignition temperature** | *EC Method A16* none below 400 degC |

|  |  |
| --- | --- |
| **Decomposition temperature** | No test data available |
| **Kinematic Viscosity** | No data available |

If Explosive Acc. EU legislation or Explosive Acc. Transp. Regul.or Method then:

|  |  |
| --- | --- |
| **Explosive properties** | No *EC Method A.14* |

|  |  |
| --- | --- |
| **Oxidizing properties** | No |

Optional if Value in kg/m3 or Remarks then:

|  |  |
| --- | --- |
| **Bulk density** | 1.1 g/cm3 *Tapped Volumetric* |

|  |  |
| --- | --- |
| **Molecular weight** | No data available |

\_

NOTE: The physical data presented above are typical values and should not be construed as a specification.\_

**10. STABILITY AND REACTIVITY\_**

**Reactivity:**

No dangerous reaction known under conditions of normal use. \_

\_

**Chemical stability:**

Unstable at elevated temperatures. \_

\_

**Possibility of hazardous reactions:**

Polymerization will not occur. \_

\_

**Conditions to avoid:**

Avoid temperatures above 160 °C\_

Active ingredient decomposes at elevated temperatures. \_

\_

**Incompatible materials:**

Avoid contact with: Strong acids. Strong bases. Strong oxidizers. \_

\_

**Hazardous decomposition products:**

Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

\_

**11. TOXICOLOGICAL INFORMATION\_**

11/3/17; BK - Lion

7/11/17; BK - TS

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*Toxicological information appears in this section when such data is available.* \_

\_

**Acute toxicity**\_

**Acute oral toxicity**\_

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. \_

\_

LD50. Rat. male and female. > 2,000 mg/kg No deaths occurred at this concentration. \_

\_

**Acute dermal toxicity**\_

No adverse effects anticipated by skin absorption. \_

\_

LD50. Rat. male and female.

> 2,000 mg/kg No deaths occurred at this concentration. \_

\_

**Acute inhalation toxicity**\_

Vapors are unlikely due to physical properties. Brief exposure (minutes) is not likely to cause adverse effects. Dust may cause irritation to upper respiratory tract (nose and throat). \_

As product: The LC50 has not been determined. \_

\_

\_

**Skin corrosion/irritation**\_

Essentially nonirritating to skin.\_

\_

**Serious eye damage/eye irritation**\_

May cause moderate eye irritation.\_

May cause slight corneal injury.\_

\_

**Sensitization**\_

Did not cause allergic skin reactions when tested in guinea pigs.\_

\_

For respiratory sensitization:\_

No relevant data found.\_

\_

**Specific Target Organ Systemic Toxicity (Single Exposure)**\_

Available data are inadequate to determine single exposure specific target organ toxicity.\_

\_

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**\_

For the active ingredient(s):\_

Excessive exposure may produce organophosphate type cholinesterase inhibition.\_

Signs and symptoms of excessive exposure to active ingredient may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions.\_

In animals, effects have been reported on the following organs:\_

Adrenal gland.\_

Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.\_

For the major component(s):\_

Excessive exposure may cause lung injury.\_

\_

**Carcinogenicity**\_

For similar active ingredient(s). Chlorpyrifos. Did not cause cancer in laboratory animals. \_

\_

**Teratogenicity**

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For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals. \_

\_

**Reproductive toxicity**

\_

For the active ingredient(s): Chlorpyrifos did not interfere with fertility in reproduction studies in laboratory animals. Some evidence of toxicity to the offspring occurred, but only at a dose high enough to produce significant toxicity to the parent animals. \_

\_

**Mutagenicity**\_

Based on a majority of negative data and some equivocal or marginally positive results, active ingredient is considered to have minimal genetic toxicity potential. \_

\_

**Aspiration Hazard**\_

Based on physical properties, not likely to be an aspiration hazard. \_

\_

**Components influencing toxicology:**\_

\_

**Chlorpyrifos**\_

**Acute inhalation toxicity** \_

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). \_

\_

LC50. Rat. 4 Hour. vapour. > 1 mg/l \_

\_

Maximum attainable concentration. No deaths occurred at this concentration. \_

\_

**Mica-group minerals**\_

**Acute inhalation toxicity** \_

Dust may cause irritation to upper respiratory tract (nose and throat). For the minor component(s): Can irritate the eyes. May cause respiratory tract irritation. \_

\_

The LC50 has not been determined. \_

\_

**Hydrated aluminum-magnesium silicate**\_

**Acute inhalation toxicity** \_

The LC50 has not been determined. \_

\_

**Limestone**\_

**Acute inhalation toxicity** \_

Dust may cause irritation to upper respiratory tract (nose and throat). \_

\_

Maximum attainable concentration. LC50. Rat. 4 Hour. dust/mist. > 3.0 mg/l No deaths occurred at this concentration. \_

\_

**Polypropylene glycol**\_

**Acute inhalation toxicity** \_

The LC50 has not been determined. \_

\_

**12. ECOLOGICAL INFORMATION\_**

\_

*Ecotoxicological information appears in this section when such data is available.*\_

\_

**Toxicity**\_

**Acute toxicity to fish**\_

Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1 mg/L in the most sensitive species).\_

\_

LC50. Rainbow trout (Oncorhynchus mykiss). semi-static test. 96 Hour. 1.1 mg/l\_

\_

**Acute toxicity to aquatic invertebrates**\_

EC50. water flea Daphnia magna. static test. 48 Hour. 0.0068 mg/l\_

\_

**Acute toxicity to algae/aquatic plants**

\_

ErC50. Pseudokirchneriella subcapitata (green algae). static test. 72 Hour. > 22 mg/l\_

\_

**Toxicity to Above Ground Organisms**\_

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).\_

\_

\_

oral LD50. Anas platyrhynchos (Mallard duck). > 2000mg/kg bodyweight.\_

\_

**Toxicity to soil-dwelling organisms**\_

LC50. Eisenia fetida (earthworms). 14 d. > 1,000 mg/kg\_

\_

**Persistence and degradability**\_

\_

**Chlorpyrifos**\_

**Biodegradability:**

Material is not readily biodegradable according to OECD/EEC guidelines. \_

10-day Window: Fail \_

**Biodegradation:**  22 % \_

**Exposure time:** 28 d \_

**Method:** OECD Test Guideline 301D or Equivalent \_

\_

**Theoretical Oxygen Demand:**

2.46 mg/mg \_

\_

**Stability in Water (1/2-life)**\_

Hydrolysis. half-life. 72 d\_

\_

**Photodegradation**\_

**Test Type:**

Half-life (indirect photolysis)\_

**Sensitization:**

OH radicals\_

**Atmospheric half-life:**

1.4 Hour\_

**Method:**

Estimated.\_

\_

**Mica-group minerals**\_

**Biodegradability:**

Biodegradation is not applicable. \_

\_

**Hydrated aluminum-magnesium silicate**\_

**Biodegradability:**

No relevant data found. \_

\_

**Limestone**\_

**Biodegradability:**

Biodegradation is not applicable. \_

\_

**Polypropylene glycol**\_

**Biodegradability:**

For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. \_

\_

**Bioaccumulative potential**\_

\_

**Chlorpyrifos** \_

**Bioaccumulation:**

Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). \_

**Partition coefficient: n-octanol/water(log Pow):** 4.7 at 20 °C Estimated. \_

\_

**Mica-group minerals** \_

**Bioaccumulation:**

Partitioning from water to n-octanol is not applicable. \_

\_

**Hydrated aluminum-magnesium silicate** \_

**Bioaccumulation:**

No relevant data found. \_

\_

**Limestone** \_

**Bioaccumulation:**

Partitioning from water to n-octanol is not applicable. \_

\_

**Polypropylene glycol** \_

**Bioaccumulation:**

For this family of materials: No bioconcentration is expected because of the relatively high water solubility. \_

\_

**Mobility in soil**\_

\_

**Chlorpyrifos** \_

Expected to be relatively immobile in soil (Koc > 5000).\_

**Partition coefficient** **(Koc):** 8151 \_

\_

**Mica-group minerals** \_

No data available.\_

\_

**Hydrated aluminum-magnesium silicate** \_

No relevant data found.\_

\_

**Limestone** \_

No relevant data found.\_

\_

**Polypropylene glycol** \_

No data available.\_

\_

**Results of PBT and vPvB assessment**\_

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. \_

\_

**Other adverse effects**\_

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**Chlorpyrifos**\_

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.\_

\_

**Mica-group minerals**\_

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.\_

\_

**Hydrated aluminum-magnesium silicate**\_

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.\_

\_

**Limestone**\_

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.\_

\_

**Polypropylene glycol**\_

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.\_

\_

**13. DISPOSAL CONSIDERATIONS\_**

**Disposal methods:** \_

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws. \_

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**14. TRANSPORT INFORMATION\_**

**\_**

**Classification for ROAD and Rail transport:\_**

|  |  |
| --- | --- |
| **Proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Chlorpyrifos) |
| **UN number** | UN 3077 |
| **Class** | 9 |
| **Packing group** | III |
| **Environmental hazards** | Chlorpyrifos |

**\_**

**\_**

**Classification for SEA transport (IMO-IMDG):\_**

|  |  |
| --- | --- |
| **Proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Chlorpyrifos) |
| **UN number** | UN 3077 |
| **Class** | 9 |
| **Packing group** | III |
| **Marine pollutant** | Chlorpyrifos |
| **Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code** | Consult IMO regulations before transporting ocean bulk |

**\_**

**Classification for AIR transport (IATA/ICAO):\_**

|  |  |
| --- | --- |
| **Proper shipping name** | Environmentally hazardous substance, solid, n.o.s.(Chlorpyrifos) |
| **UN number** | UN 3077 |
| **Class** | 9 |
| **Packing group** | III |

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\_

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This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.\_

\_

**15. REGULATORY INFORMATION\_**

\_

**Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.**\_

Listed in Regulation: ENVIRONMENTAL HAZARDS\_

Number in Regulation: E1\_

100 t\_

200 t\_

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Classification and labeling have been performed according to Regulation (EC) No 1272/2008.\_

**16. OTHER INFORMATION\_**

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**Full text of H-Statements referred to under sections 2 and 3.**\_

|  |  |
| --- | --- |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

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**Revision\_**

Identification Number:21719 / A285 / Issue Date: 03/05/2018 / Version: 1.1\_

DAS Code: EF-726\_

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.\_

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**Legend\_**

|  |  |
| --- | --- |
| ACGIH | USA. ACGIH Threshold Limit Values (TLV) |
| Dow IHG | Dow Industrial Hygiene Guideline |
| IL BEI | Israel. Safety at Work Regulations - Annex III Biological Exposure Indices |
| SKIN, BEI | Absorbed via Skin, Biological Exposure Indice |
| TWA | 8-hr TWA |
| US WEEL | USA. Workplace Environmental Exposure Levels (WEEL) |

|  |  |
| --- | --- |
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |

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**Full text of other abbreviations**\_

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance 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\_

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**Information Source and References**\_

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company. \_

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