# SAFETY DATA SHEET

## Sonic®

| Version | Revision Date: | SDS Number: | Date of last issue: - |
|---|---|---|---|
| 1.0 | 01/25/2022 | 800080004857 | Date of first issue: 01/25/2022 |

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

### SECTION 1. IDENTIFICATION

Product name : Sonic®

**Manufacturer or supplier's details**

**COMPANY IDENTIFICATION**

**Manufacturer/importer** : CORTEVA AGRISCIENCE LLC
9330 ZIONSVILLE RD
INDIANAPOLIS, IN, 46268-1053
UNITED STATES

**Customer Information Number** : 800-992-5994

**E-mail address** : customerinformation@corteva.com

**Emergency telephone** : INFOTRAC (CONTRACT 84224).

800-992-5994 or 317-337-6009

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

Recommended use : End use herbicide product

### SECTION 2. HAZARDS IDENTIFICATION

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

Eye irritation : Category 2A

Reproductive toxicity : Category 2

Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Nervous system)

**GHS label elements**

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure if inhaled.

Precautionary Statements :

**Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

**Storage:**

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) |
|---|---|---|
| Sulfentrazone | 122836-35-5 | 62.1 |
| Cloransulam-methyl | 147150-35-4 | 7.9 |
| Sodium lignosulfonate | 8061-51-6 | >= 3 - < 10 |
| toluene | 108-88-3 | >= 3 - < 10 |
| Sodium N-methyl-N-oleoyltaurine | 137-20-2 | >= 1 - < 3 |
| Sodium chloride | 7647-14-5 | >= 1 - < 3 |
| Quartz | 14808-60-7 | >= 0.3 - < 1 |
| Balance | Not Assigned | > 1 |

Actual concentration is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| If inhaled | : | 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. |
| In case of 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. |
| In case of 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. |
| If swallowed | : | Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.<br>Never give anything by mouth to an unconscious person. |
| Most important symptoms and effects, both acute and delayed | : | None known. |
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).<br>If potential for exposure exists refer to Section 8 for specific personal protective equipment. |
| Notes to physician | : | No specific antidote.<br>Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.<br>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. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Water spray<br>Alcohol-resistant foam |
| Unsuitable extinguishing media | : | None known. |
| Specific hazards during fire fighting | : | Exposure to combustion products may be a hazard to health.<br>Do not allow run-off from firefighting to enter drains or water courses. |
| 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.<br><br>Combustion products may include and are not limited to:<br>Sulfur oxides<br>Nitrogen oxides (NOx)<br>Hydrogen fluoride<br>Hydrogen chloride gas<br>Carbon oxides |

| | | |
|---|---|---|
| Specific extinguishing methods | : | Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Avoid dust formation.<br>Avoid breathing dust.<br>Use personal protective equipment.<br>Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. |
| Environmental precautions | : | If the product contaminates rivers and lakes or drains inform respective authorities.<br>Discharge into the environment must be avoided.<br>Prevent further leakage or spillage if safe to do so.<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained.<br>Prevent from entering into soil, ditches, sewers, underwater.<br>See Section 12, Ecological Information. |
| Methods and materials for containment and cleaning up | : | Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.<br>Pick up and arrange disposal without creating dust.<br>Recovered material should be stored in a vented container.<br>The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to overpressurization of the container.<br>Keep in suitable, closed containers for disposal.<br>Sweep up or vacuum up spillage and collect in suitable container for disposal.<br>See Section 13, Disposal Considerations, for additional information. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Do not breathe vapors/dust.<br>Do not smoke.<br>Handle in accordance with good industrial hygiene and safety practice.<br>Smoking, eating and drinking should be prohibited in the ap- |

plication area.
Do not get on skin or clothing.
Avoid inhalation of vapor or mist.
Do not swallow.
Do not get in eyes.
Avoid contact with skin and eyes.
Take care to prevent spills, waste and minimize release to the environment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Conditions for safe storage : Store in a closed container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in properly labeled containers.
Store in accordance with the particular national regulations.

Materials to avoid : Strong oxidizing agents

Packaging material : Unsuitable material: None known.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Cloransulam-methyl | 147150-35-4 | TWA | 3 mg/m3 | Dow IHG |
| toluene | 108-88-3 | TWA | 20 ppm | ACGIH |
| | | TWA | 200 ppm | OSHA Z-2 |
| | | CEIL | 300 ppm | OSHA Z-2 |
| | | Peak | 500 ppm (10 minutes) | OSHA Z-2 |
| Sodium chloride | 7647-14-5 | TWA | 10 mg/m3 | Dow IHG |
| Quartz | 14808-60-7 | TWA (Respirable dust) | 0.05 mg/m3 | OSHA Z-1 |
| | | TWA (respirable) | 10 mg/m3 / %SiO2+2 | OSHA Z-3 |
| | | TWA (respirable) | 250 mppcf / %SiO2+5 | OSHA Z-3 |
| | | TWA (Respirable particulate matter) | 0.025 mg/m3 (Silica) | ACGIH |
| | | PEL (respirable) | 0.05 mg/m3 | OSHA CARC |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---|---|---|---|---|---|---|
| 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** : Use engineering controls to maintain airborne level below exposure limit requirements or guidelines.
If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation.
Local exhaust ventilation may be necessary for some operations.

**Personal protective equipment**

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, use an approved respirator.
Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material.
For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Hand protection

Remarks : Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Eye protection : Use safety glasses (with side shields).
If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin and body protection : Use protective clothing chemically resistant to this material.
Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | Granules. |
| Color | : | Tan |
| Odor | : | Musty |
| Odor Threshold | : | No data available |
| pH | : | 6 - 8 |
| Melting point/range | : | No data available |
| Freezing point | | Not applicable |
| Boiling point/boiling range | : | Not applicable |
| Flash point | : | Method: closed cup<br>Not applicable |
| Evaporation rate | : | Not applicable |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | Not applicable |
| Lower explosion limit / Lower flammability limit | : | Not applicable |
| Vapor pressure | : | Not applicable |
| Relative vapor density | : | Not applicable |
| Density | : | Not applicable |
| Bulk density | : | 561 - 673 kg/m3 |
| Solubility(ies) | | |
| Water solubility | : | Dispersible |
| Autoignition temperature | : | Not applicable |
| Viscosity | | |
| Viscosity, dynamic | : | Not applicable |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | Not classified as a reactivity hazard. |
| Chemical stability | : | No decomposition if stored and applied as directed.<br>Stable under normal conditions. |
| Possibility of hazardous reactions | : | Stable under recommended storage conditions.<br>No hazards to be specially mentioned.<br>None known. |
| Conditions to avoid | : | None known. |
| Incompatible materials | : | None. |
| Hazardous decomposition products | : | Decomposition products depend upon temperature, air supply and the presence of other materials.<br>Decomposition products can include and are not limited to:<br>Sulfur oxides<br>Nitrogen oxides (NOx)<br>Hydrogen fluoride<br>Hydrogen chloride gas<br>Carbon oxides |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 2,504 mg/kg<br>Remarks: For similar material(s): |
| Acute inhalation toxicity | : | LC50 (Rat): > 4.9 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity<br>Remarks: For similar material(s): |
| Acute dermal toxicity | : | LD50 (Rabbit): > 5,000 mg/kg<br>Remarks: For similar material(s): |

**Components:**

**Sulfentrazone:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 2,855 mg/kg |
| Acute inhalation toxicity | : | Remarks: Prolonged excessive exposure to dust may cause adverse effects.<br>Dust may cause irritation to upper respiratory tract (nose and throat).<br>Vapors are unlikely due to physical properties.<br><br>LC50 (Rat): > 4.14 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

**Cloransulam-methyl:**

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : Remarks: No adverse effects are anticipated from single exposure to dust.
Vapors are unlikely due to physical properties.

LC50 (Rat, male and female): > 3.77 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Symptoms: The LC50 value is greater than the Maximum Attainable Concentration., No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

**Sodium lignosulfonate:**

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.48 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

**toluene:**

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

Acute inhalation toxicity : LC50 (Rat, male): 25.7 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Remarks: Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness.
Alcohol consumption and exertion may increase the adverse effects of toluene.

LC50 (Rat, female): 30 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 12,267 mg/kg

**Sodium N-methyl-N-oleoyltaurine:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

**Sodium chloride:**

Acute oral toxicity : LD50 (Rat): > 3,550 mg/kg
Remarks: Excessive exposure may cause:
Nausea and/or vomiting.

Acute inhalation toxicity : LC50 (Rat): > 42 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 10,000 mg/kg

**Skin corrosion/irritation**

**Components:**

**toluene:**

Species : Rabbit
Result : Skin irritation

**Sodium chloride:**

Species : Rabbit
Result : No skin irritation

**Quartz:**

Result : No skin irritation

**Serious eye damage/eye irritation**

**Components:**

**Sodium lignosulfonate:**

Result : Eye irritation

**toluene:**

Species : Rabbit
Result : No eye irritation

**Sodium N-methyl-N-oleoyltaurine:**

Species : Rabbit
Result : Eye irritation

**Sodium chloride:**

Species : Rabbit
Result : No eye irritation

**Quartz:**

Result : No eye irritation

**Respiratory or skin sensitization**

**Product:**

Species : Guinea pig
Assessment : Does not cause skin sensitization.
Remarks : For similar material(s):

**Components:**

**Sulfentrazone:**

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

**Cloransulam-methyl:**

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

**Sodium lignosulfonate:**

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

**toluene:**

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

**Sodium N-methyl-N-oleoyltaurine:**

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

**Germ cell mutagenicity**

**Components:**

**Sulfentrazone:**

Germ cell mutagenicity - Assessment : Negative in genetic toxicity tests.

**Cloransulam-methyl:**

Germ cell mutagenicity - : In vitro genetic toxicity studies were negative., Animal genetic

Assessment toxicity studies were negative.

**Sodium lignosulfonate:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

**toluene:**

Germ cell mutagenicity - Assessment : The majority and most reliable of the many genetic toxicity studies on toluene, both in vitro and in animals, indicate that it is not genetically toxic.

**Sodium N-methyl-N-oleoyltaurine:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

**Sodium chloride:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were predominantly negative.

**Quartz:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative in some cases and positive in other cases.

**Carcinogenicity**

**Product:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

**Components:**

**Sulfentrazone:**

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

**Cloransulam-methyl:**

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

**toluene:**

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

**Quartz:**

Carcinogenicity - Assessment : Human carcinogen.

Has caused cancer in humans., Has caused cancer in laboratory animals.

| | | |
|---|---|---|
| **IARC** | Group 1: Carcinogenic to humans<br>Quartz<br>(Silica dust, crystalline) | 14808-60-7 |
| **OSHA** | OSHA specifically regulated carcinogen<br>Quartz | 14808-60-7 |

(crystalline silica)

| | | |
|---|---|---|
| **NTP** | Known to be human carcinogen<br>Quartz<br>(Silica, Crystalline (Respirable Size)) | 14808-60-7 |

**Reproductive toxicity**

**Components:**

**Sulfentrazone:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | In animal studies, it has been shown to cause effects on sperm which may interfere with fertility in males., In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.<br>Has been toxic to the fetus in laboratory animal tests. |

**Cloransulam-methyl:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | In animal studies, did not interfere with reproduction.<br>Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother. |

**toluene:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | In animal studies, has been shown to interfere with reproduction., Some evidence of adverse effects on development, based on animal experiments.<br>In laboratory animals, toluene has been toxic to the fetus at doses toxic to the mother; it has caused birth defects in mice when administered orally, but not by inhalation. |

**Sodium N-methyl-N-oleoyltaurine:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | Screening studies suggest that this material does not affect reproduction. |

**Quartz:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | For similar material(s):, Did not cause birth defects or any other fetal effects in laboratory animals. |

**STOT-single exposure**

**Product:**

| | | |
|---|---|---|
| Assessment | : | Evaluation of available data suggests that this material is not an STOT-SE toxicant. |

**Components:**

**Sulfentrazone:**

| | | |
|---|---|---|
| Assessment | : | Evaluation of available data suggests that this material is not an STOT-SE toxicant. |

**Cloransulam-methyl:**

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**toluene:**

Routes of exposure : Inhalation
Target Organs : Central nervous system
Assessment : May cause drowsiness or dizziness.

**Sodium N-methyl-N-oleoyltaurine:**

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Sodium chloride:**

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Quartz:**

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**STOT-repeated exposure**

**Components:**

**toluene:**

Routes of exposure : Inhalation
Target Organs : Nervous system
Assessment : May cause damage to organs through prolonged or repeated exposure.

**Quartz:**

Routes of exposure : Inhalation
Target Organs : Lungs
Assessment : Causes damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity**

**Components:**

**Sulfentrazone:**

Remarks : In animals, effects have been reported on the following organs:
Blood.

**Cloransulam-methyl:**

Remarks : In animals, effects have been reported on the following organs:
Kidney.

Liver.
Testes.
Thyroid.

**Sodium lignosulfonate:**

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**toluene:**

Remarks : In animals, effects have been reported on the following organs:
central nervous system (CNS) effects
Excessive exposure may cause neurologic signs and symptoms.
Toluene has caused hearing loss in laboratory animals upon exposure to high concentrations.
Intentional misuse by deliberately inhaling toluene may cause nervous system damage, hearing loss, liver and kidney effects and death.

**Sodium N-methyl-N-oleoyltaurine:**

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Sodium chloride:**

Remarks : Medical experience with sodium chloride has shown a strong association between elevated blood pressure and prolonged dietary overuse. Related effects could occur in the kidneys.

**Quartz:**

Remarks : In humans, effects have been reported on the following organs:
Kidney.
Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

**Aspiration toxicity**

**Product:**

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

**Components:**

**Sulfentrazone:**

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

**Cloransulam-methyl:**

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

**Sodium lignosulfonate:**
Based on available information, aspiration hazard could not be determined.

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

**Sodium N-methyl-N-oleoyltaurine:**
Based on available information, aspiration hazard could not be determined.

**Sodium chloride:**
Based on physical properties, not likely to be an aspiration hazard.

**Quartz:**
Based on physical properties, not likely to be an aspiration hazard.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**Sulfentrazone:**

| | | |
|---|---|---|
| Toxicity to fish | : | Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).<br><br>LC50 (Lepomis macrochirus (Bluegill sunfish)): 93.8 mg/l<br>Exposure time: 96 h<br>Method: Method Not Specified.<br><br>LC50 (Oncorhynchus mykiss (rainbow trout)): > 130 mg/l<br>Exposure time: 96 h<br>Method: Method Not Specified. |
| Toxicity to daphnia and other aquatic invertebrates | : | LC50 (Daphnia magna (Water flea)): 60.4 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 0.03 mg/l<br>End point: Growth rate<br>Exposure time: 120 h<br>Method: Method Not Specified.<br><br>EC50 (Navicula pelliculosa (Freshwater diatom)): 0.04 mg/l<br>End point: Growth rate<br>Exposure time: 120 h<br>Method: Method Not Specified. |
| M-Factor (Acute aquatic toxicity) | : | 10 |

| | | |
|---|---|---|
| M-Factor (Chronic aquatic toxicity) | : | 10<br><br>10 |
| Toxicity to terrestrial organisms | : | Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg)., Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).<br><br>oral LD50 (Anas platyrhynchos (Mallard duck)): > 2,250 mg/kg<br><br>dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5,620 mg/kg<br>Exposure time: 8 d |

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Acute aquatic toxicity | : | Very toxic to aquatic life. |
| Chronic aquatic toxicity | : | Very toxic to aquatic life with long lasting effects. |

**Cloransulam-methyl:**

| | | |
|---|---|---|
| Toxicity to fish | : | Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).<br><br>LC50 (Oncorhynchus mykiss (rainbow trout)): > 86 mg/l<br>Exposure time: 96 h<br>Test Type: static test |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 40 mg/l<br>Exposure time: 48 h<br>Test Type: static test |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 41.5 - 2,700 mg/l<br>End point: Growth inhibition (cell density reduction)<br>Exposure time: 5 d<br><br>ErC50 (Lemna gibba): 0.00154 mg/l<br>Exposure time: 7 d |
| M-Factor (Acute aquatic toxicity) | : | 100 |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Fathead minnow (Pimephales promelas)): 10.1 mg/l<br>Exposure time: 33 d<br>Test Type: flow-through |
| M-Factor (Chronic aquatic toxicity) | : | 100 |
| Toxicity to soil dwelling organisms | : | LC50 (Eisenia fetida (earthworms)): > 859 mg/kg<br>Exposure time: 14 d<br>End point: survival |
| Toxicity to terrestrial organisms | : | Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg)., Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). |

oral LD50 (Colinus virginianus (Bobwhite quail)): > 2250 mg/kg bodyweight.

dietary LC50 (Colinus virginianus (Bobwhite quail)): > 5000 mg/kg diet.

contact LD50 (Apis mellifera (bees)): > 25 µg/bee
Exposure time: 48 h

**Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**Sodium lignosulfonate:**

Toxicity to fish : Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50 (Pimephales promelas (fathead minnow)): 615 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202 or Equivalent
Remarks: For this family of materials:

**toluene:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5.8 mg/l
Exposure time: 96 h
Test Type: semi-static test

LC50 (Fish): 5.5 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 7 mg/l
Exposure time: 24 h
Test Type: static test
Method: OECD Test Guideline 202

LC50 (water flea Ceriodaphnia dubia): 3.78 mg/l
Exposure time: 48 h
Test Type: semi-static test

Toxicity to algae/aquatic plants : EbC50 (Pseudokirchneriella subcapitata (green algae)): 12.5 mg/l
End point: Biomass
Exposure time: 72 h
Method: OECD Test Guideline 201

| | | |
|---|---|---|
| Toxicity to fish (Chronic toxicity) | : | NOEC (Fish): 1.4 mg/l<br>End point: growth<br>Exposure time: 40 d<br>Test Type: flow-through test |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Ceriodaphnia dubia (water flea)): 0.74 mg/l<br>End point: number of offspring<br>Exposure time: 7 d<br><br>NOEC (Daphnia magna (Water flea)): 2 mg/l<br>End point: number of offspring<br>Exposure time: 21 d |
| Toxicity to microorganisms | : | IC50 (Bacteria): 29 mg/l<br>Exposure time: 16 h |
| Toxicity to soil dwelling organisms | : | LC50 (Eisenia fetida (earthworms)): 150 - 280 mg/kg |

**Sodium N-methyl-N-oleoyltaurine:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Danio rerio (zebra fish)): 1.32 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 5.76 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): 197 mg/l<br>Exposure time: 72 h |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 2 mg/l<br>Exposure time: 21 d |

**Sodium chloride:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Lepomis macrochirus (Bluegill sunfish)): 5,840 mg/l<br>Exposure time: 96 h<br>Test Type: flow-through test<br>Method: OECD Test Guideline 203 or Equivalent<br><br>LC50 (Pimephales promelas (fathead minnow)): 10,610 mg/l<br>Exposure time: 96 h<br>Test Type: static test<br>Method: OECD Test Guideline 203 or Equivalent |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 1,900 mg/l<br>Exposure time: 48 h<br>Test Type: static test |
| Toxicity to algae/aquatic plants | : | EC50 (Other): 2,430 mg/l<br>End point: Growth inhibition (cell density reduction)<br>Exposure time: 120 h<br>Test Type: static test<br>Method: OECD Test Guideline 201 or Equivalent |
| Toxicity to microorganisms | : | IC50 (activated sludge): > 1,000 mg/l<br>Method: OECD 209 Test |

**Quartz:**

Toxicity to fish : Remarks: Based on information for a similar material:
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50 (Danio rerio (zebra fish)): 508 mg/l
Exposure time: 96 h
Remarks: Based on information for a similar material:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 731 mg/l
Exposure time: 48 h
Remarks: For similar material(s):

**Persistence and degradability**

**Components:**

**Cloransulam-methyl:**

Biodegradability : Remarks: Surface photodegradation is expected with exposure to sunlight.
Material is not readily biodegradable according to OECD/EEC guidelines.
Biodegradation rate may increase in soil and/or water with acclimation.

Stability in water : Test Type: Hydrolysis
Degradation half life (half-life): 33.5 d (25 °C) pH: > 8
Method: Estimated.

Test Type: Hydrolysis
Degradation half life (half-life): 335.34 d (25 °C) pH: 7
Method: Estimated.

Photodegradation : Test Type: Half-life (direct photolysis)

Test Type: Half-life (indirect photolysis)
Sensitizer: OH radicals
Concentration: 1,500,000 1/cm3
Rate constant: 1.082E-11 cm3/s
Method: Estimated.

**Sodium lignosulfonate:**

Biodegradability : Remarks: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

Biodegradation: < 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301E
Remarks: 10-day Window: Fail

Photodegradation : Rate constant: 1.089E-10 cm3/s
Method: Estimated.

**toluene:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 14 d
Method: OECD Test Guideline 301C or Equivalent
Remarks: 10-day Window: Not applicable

ThOD : 3.13 kg/kg
Method: Calculated.

Photodegradation : Test Type: Half-life (indirect photolysis)
Sensitizer: OH radicals
Concentration: 1,500,000 1/cm3
Rate constant: 5.23E-12 cm3/s
Method: Estimated.

**Sodium N-methyl-N-oleoyltaurine:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 80 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

**Quartz:**

Biodegradability : Remarks: Biodegradation is not applicable.

**Bioaccumulative potential**

**Components:**

**Sulfentrazone:**

Partition coefficient: n-octanol/water : Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

log Pow: 1.48
Method: Estimated.

**Cloransulam-methyl:**

Bioaccumulation : Bioconcentration factor (BCF): 23.97
Method: Estimated.

Partition coefficient: n-octanol/water : log Pow: 1.12
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Sodium lignosulfonate:**

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 3.2

Partition coefficient: n-octanol/water :

log Pow: -3.45
Method: Estimated.
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**toluene:**

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 13.2 - 90
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 2.73
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Sodium N-methyl-N-oleoyltaurine:**

Partition coefficient: n-octanol/water : Pow: 1.36 (68 °F / 20 °C)
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Sodium chloride:**

Partition coefficient: n-octanol/water : Remarks: No bioconcentration is expected because of the relatively high water solubility.
Partitioning from water to n-octanol is not applicable.

**Quartz:**

Partition coefficient: n-octanol/water : Remarks: Partitioning from water to n-octanol is not applicable.

**Balance:**

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

**Mobility in soil**

**Components:**

**Sulfentrazone:**

Distribution among environmental compartments : Koc: 43
Method: Estimated.
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

**Cloransulam-methyl:**

Distribution among environ- : Koc: 12 - 262

mental compartments

Method: Measured
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

**Sodium lignosulfonate:**

Distribution among environmental compartments : Koc: > 99999
Method: Estimated.
Remarks: Expected to be relatively immobile in soil (Koc > 5000).

**toluene:**

Distribution among environmental compartments : Koc: 37 - 178
Method: Estimated.
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

**Sodium chloride:**

Distribution among environmental compartments : Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

**Quartz:**

Distribution among environmental compartments : Remarks: No relevant data found.

**Balance:**

Distribution among environmental compartments : Remarks: No relevant data found.

**Other adverse effects**

**Components:**

**Sulfentrazone:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Cloransulam-methyl:**

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Sodium lignosulfonate:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**toluene:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Sodium N-methyl-N-oleoyltaurine:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Sodium chloride:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Regulation: (Update: 12/17/2010; RT)
Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Quartz:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Balance:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues : 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 identifica-

tion and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## SECTION 14. TRANSPORT INFORMATION

### International Regulations

**UNRTDG**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Sulfentrazone, Cloransulam-methyl) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (Sulfentrazone, Cloransulam-methyl) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous |
| Packing instruction (cargo aircraft) | : | 956 |
| Packing instruction (passenger aircraft) | : | 956 |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Sulfentrazone, Cloransulam-methyl) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |
| Remarks | : | Stowage category A |

**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 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (Toluene) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | CLASS 9 |
| ERG Code | : | 171 |
| Marine pollutant | : | no |

**Further information**

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

**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

**SARA 311/312 Hazards** : Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

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

| | | |
|---|---|---|
| toluene | 108-88-3 | >= 1 - < 5 % |

**US State Regulations**

**Pennsylvania Right To Know**

| | |
|---|---|
| toluene | 108-88-3 |
| dichloromethane | 75-09-2 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including Quartz, dichloromethane, which is/are known to the State of California to cause cancer, and
toluene, methanol, 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.

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

TSCA : Product contains substance(s) not listed on TSCA inventory.

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**Federal Insecticide, Fungicide and Rodenticide Act**

EPA Registration Number : 62719-680

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 swallowed.
Causes moderate eye irritation.

## SECTION 16. OTHER INFORMATION

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.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH BEI | : | ACGIH - Biological Exposure Indices (BEI) |
| Dow IHG | : | Dow Industrial Hygiene Guideline |
| OSHA CARC | : | OSHA Specifically Regulated Chemicals/Carcinogens |
| 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 |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| Dow IHG / TWA | : | Time Weighted Average (TWA): |
| Dow IHG / TWA | : | Time weighted average |
| OSHA CARC / PEL | : | Permissible exposure limit (PEL) |
| 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 |
| OSHA Z-3 / TWA | : | 8-hour 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 Admin-

istration; 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; 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 : 01/25/2022

Product code: GF-1963

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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