Material Safety Data Sheet

SURROUND CF Crop Protectant

MSDS Number: 2526        Revised: (7/9/2009)      6 Pages

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

1.0 Product Name .................................... SURROUND CF CROP PROTECTANT EPA # 61842-16
Chemical Family .................................... Inorganic solid silicate
Synonyms ........................................... Hydrated aluminum silicate, china clay
Formula ............................................. Al₂Si₂O₅(OH)₄

1.2 Manufacturer ..................................... Tessenderlo Kerley Inc.
2255 N. 44th Street, Suite 300
Phoenix, Arizona 85008-3279
Information .......................................... (602) 889-8300

1.3 Emergency Contact .............................. (866) 374-1975 (Tessenderlo Kerley)
(800) 424-9300 (CHEMTREC)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

2.1 Chemical Ingredients (% by wt.)
Kaolin     CAS #: 1332-58-7   95%
Proprietary ingredients       5%

(See Section 8 for exposure guidelines)

Section 3: HAZARDS IDENTIFICATION

NFPA:   Health - 1   Flammability - 0   Reactivity - 0

EMERGENCY OVERVIEW

Avoid contact with eyes – may cause eye irritation.
KEEP OUT OF REACH OF CHILDREN
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling
3.1 POTENTIAL HEALTH EFFECTS  (if product not handled in the recommended manner)

EYE: Contact with the eyes may cause slight (temporary) eye irritation. Corneal injury is unlikely.

SKIN CONTACT: Contact with product - repeated/prolonged skin contact may cause slight skin irritation.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Single oral dose toxicity is low. Ingestion of product may cause irritation of the gastrointestinal tract possibly resulting in upset stomach, vomiting and/or diarrhea.

INHALATION: Inhalation of product vapors (low) is not considered to be hazardous

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA. See Section 11, Toxicological Information

4.1 EYES: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain immediate medical attention. Continue flushing if medical help not immediately available.

4.2 SKIN: Immediately flush with large quantities of water for 15 minutes. Remove contaminated clothing under a safety shower. Do not neutralize with chemical agents. Obtain medical attention if irritation occurs.

4.3 INGESTION: DO NOT INDUCE VOMITING. Give 1 or 2 glasses of water. If vomiting does occur, repeat fluid administration. If unconscious or convulsing, do not give fluids. Obtain immediate medical attention.

4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

5.1 FLAMMABLE PROPERTIES

FLASH POINT: NA  METHOD USED: NA

5.2 FLAMMABLE LIMITS

5.3 EXTINGUISHING MEDIA: Use extinguishing media as appropriate for combustibles involved in fire.

5.4 FIRE & EXPLOSIVE HAZARDS: No particular hazards known.

5.5 FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Small releases: Clear area. Shut off leak if safely possible. Do not wash small spills away. Ensure adequate ventilation. Do not discharge into drains or surface waters/groundwater. Shovel material into a suitable container for disposal. Dispose as directed by the pesticide product label.

6.2 Large releases: Cordon off area of spillage and dike area with dirt, sand or other inert material to prevent any further migration. Recover as much of usable product for application (best disposal practice). Handle remaining material as a small spill above.

Section 7: HANDLING and STORAGE

7.1 Handling: Manufacturing, commercial blending, packaging and applicator personnel must refer to the Product Label and Directions for Use Attached to the product for Agricultural Use requirements in accordance with the EPA Worker Protection Standard. Keep out of reach of children. Use only in a well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin and eyes. Wash thoroughly with soap and water after handling. Wash exposed clothing before reuse.

7.2 Storage: Store in cool, dry, well ventilated areas away from ignition sources, heat or flame. Protect containers from physical damage and contamination.

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

All personnel who handle this product in its end-use application should use this product only in accordance with its pesticide labeling and with the “Worker Protection Standard”, 40 CFR 170. Wear long-sleeve work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with shower and eye wash.

8.1 RESPIRATORY PROTECTION: Use NIOSH approved respirators to avoid breathing product if ventilation is inadequate.

8.2 SKIN PROTECTION: Where gloves and protective suit to prevent repeated or prolonged contact with the skin.

8.3 EYE PROTECTION: Chemical goggles and a full face shield to prevent contact with face and eyes.

8.4 EXPOSURE GUIDELINES: OSHA ACGIH

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<th>PEL</th>
<th>STEL</th>
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<td>Kaolin</td>
<td>5 to 15 mg/m³</td>
<td>2 mg/m³ NA</td>
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8.5 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors.
Section 9: PHYSICAL and CHEMICAL PROPERTIES.

9.1 APPEARANCE: white powder
9.2 ODOR: odorless
9.3 BOILING POINT: NA
9.4 VAPOR PRESSURE: NA
9.5 VAPOR DENSITY: NA
9.6 SOLUBILITY IN WATER: insoluble
9.7 BULK DENSITY: 288.3 kg/m$^3$ (17.998 lb/ft$^3$)
9.8 FREEZING POINT: NA
9.9 pH: NA
9.10 VOLATILE: NA
9.11 MELTING POINT Not determined

Section 10: STABILITY and REACTIVITY

10.1 STABILITY: This is a stable material under normal storage conditions.
10.2 HAZARDOUS POLYMERIZATION: Will not occur.
10.3 HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products if stored and handled as prescribed.
10.4 INCOMPATIBILITY: Avoid all sources of ignition, heat or open flame. Avoid prolonged exposure to excessive temperatures. Avoid contact with oxidizing agents, acids or alkalis.

Section 11: TOXICOLOGICAL INFORMATION

11.1 ORAL: Oral-Rat LD$_{50}$: > 5,000 mg/kg (kaolin)
11.2 DERMAL: Data not available
11.3 INHALATION: Data not available.
11.4 CHRONIC/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.
11.5 TERATOLOGY: Data not available
11.6 REPRODUCTION: Data not available
11.7 MUTAGENICITY: Data not available

Section 12: ECOLOGICAL INFORMATION

To avoid impact on threatened or endangered aquatic plant or animal species, users must consult with state fish and game agency or U.S. Fire & Wildlife Service before making applications. Do not contaminate water when disposing of equipment wash waters.
Section 12: ECOLOGICAL INFORMATION, Cont.

Ecological data not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal of product waste should be handled by licensed waste handlers in accordance with all governmental regulations. This product is not regulated under RCRA.

Section 14: TRANSPORT INFORMATION

14.1 DOT Shipping Name: Not regulated
14.2 DOT Hazard Class: NA
14.3 UN/NA Number: NA
14.4 Packing Group: NA
14.5 DOT Placard: NA
14.6 DOT Label(s): NA
14.7 IMO Shipping Name: NA
14.8 RQ (Reportable Quantity): NA
14.9 RR STCC Number: NA
14.10 DOT/IMO Mark NA
14.11 IATA Shipping Name: NA

Section 15: REGULATORY INFORMATION

15.1 OSHA: This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

15.2 SARA TITLE III: a. EHS (Extremely Hazardous Substance) List: No
   b. Section 311/312, (Tier I,II) Categories: Immediate (acute) Yes
      Fire No
      Sudden release No
      Reactivity No
      Delayed (chronic) Yes
   c. Section 313 (Toxic Release Reporting-Form R): No
   d. TPQ (Threshold Planning Quantity): No
Section 15: REGULATORY INFORMATION, Cont.

15.3 CERCLA/SUPERFUND: RQ (Reportable Quantity) No

15.4 TSCA (Toxic Substance Control Act) Inventory List: Yes

15.5 RCRA (Resource Conservation and Recovery Act) Status: No

15.6 WHMIS (Canada) Hazard Classification: ND

15.7 DOT Hazardous Material: (See Section 14) No

15.8 CAA Hazardous Air Pollutant (HAP) No

15.9 FIFRA Registered pesticide Yes

EPA REG #61842-16

15.10 Prop 65 (CA) Yes

15.11 EU Classification

Section 16: OTHER INFORMATION

REVISIONS: The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993, by Technical Services-Tessenderlo Kerley, Inc.

Revised Section 1.3, Emergency Contact, 7/9/2009.