This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Virkon™ S
Tradename/Synonym : Virkon S Amarillo
Product Use : Disinfectant, Cleaning agent, For professional users only.
Restrictions on use : Do not use product for anything outside of the above specified uses
Manufacturer/Supplier : The Chemours Company FC, LLC
1007 Market Street
Wilmington, DE 19899
United States of America
Product Information : 1-844-773-CHEM (outside the U.S. 1-302-773-1000)
Transport Emergency : CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category
Acute toxicity (Inhalation) : Category 4
Skin irritation : Category 2
Serious eye damage/eye irritation : Category 1
Label content
Pictogram:

Signal word: Danger

Hazardous warnings:
- Causes skin irritation.
- Causes serious eye damage.
- Harmful if inhaled.

Hazardous prevention measures:
- Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- Wash skin thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear eye protection/ face protection.
- Wear protective gloves.
- IF ON SKIN: Wash with plenty of soap and water.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a POISON CENTER or doctor/ physician if you feel unwell.
- 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 or doctor/ physician.
- If skin irritation or rash occurs: Get medical advice/ attention.
- Take off contaminated clothing and wash before reuse.

Other hazards
No applicable data available.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium peroxymonosulfate</td>
<td>10058-23-8</td>
<td>21.41 %</td>
</tr>
<tr>
<td>Sulfamic acid</td>
<td>5329-14-6</td>
<td>4 - 6 %</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>7647-14-5</td>
<td>1.5 %</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : When symptoms persist or in all cases of doubt seek medical advice.

Inhalation : Move to fresh air. Consult a physician if necessary.

Skin contact : In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Consult a physician if necessary.

Eye contact : Rinse immediately with plenty of water and seek medical advice.

Ingestion : Call a poison control center or doctor for treatment advice. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed : No applicable data available.
**Virkon™ S**

Version 3.1

Revision Date 04/01/2016  Ref. 130000093734

<table>
<thead>
<tr>
<th>Protection of first-aiders</th>
<th>If potential for exposure exists refer to Section 8 for specific personal protective equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes to physician</td>
<td>No applicable data available.</td>
</tr>
</tbody>
</table>

### SECTION 5. FIREFIGHTING MEASURES

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Water spray, Dry powder, Alcohol-resistant foam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Carbon dioxide (CO2)</td>
</tr>
<tr>
<td>Specific hazards</td>
<td>No applicable data available.</td>
</tr>
<tr>
<td>Special protective equipment for firefighters</td>
<td>In the event of fire, wear self-contained breathing apparatus. Wear suitable protective equipment.</td>
</tr>
<tr>
<td>Further information</td>
<td>Evacuate personnel to safe areas. Standard procedure for chemical fires.</td>
</tr>
</tbody>
</table>

### SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

<table>
<thead>
<tr>
<th>Safeguards (Personnel)</th>
<th>Wear personal protective equipment. Avoid contact with skin and eyes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental precautions</td>
<td>Prevent material from entering sewers, waterways, or low areas.</td>
</tr>
<tr>
<td>Spill Cleanup</td>
<td>Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water.</td>
</tr>
<tr>
<td>Accidental Release Measures</td>
<td>Dispose of in accordance with local regulations.</td>
</tr>
</tbody>
</table>

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SECTION 7. HANDLING AND STORAGE

Handling (Personnel): Avoid contact with skin, eyes and clothing. Do not get on clothing. Wash off with plenty of water. Wash clothing after use. Do not breathe dust. Avoid dust formation in confined areas. For personal protection see section 8. General industrial hygiene practice.

Handling (Physical Aspects): No applicable data available.
Dust explosion class: No applicable data available.
Storage: Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Keep away from: Combustible material. No decomposition if stored and applied as directed.

Storage period: No applicable data available.
Storage temperature: No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Provide local exhaust ventilation when handling material in bulk. Ensure adequate ventilation.

Personal protective equipment
Respiratory protection: Provide adequate ventilation. Wear NIOSH approved respiratory protection as appropriate.

Hand protection: Material: Impervious gloves. Additional protection: No particular glove type is recommended, but nitrile may be used.

Eye protection: Safety glasses with side-shields

Skin and body protection: Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots.

Exposure Guidelines

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Exposure Limit Values

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
  No applicable data available.

- Sulfamic acid
  No applicable data available.

- Dipotassium peroxodisulphate
  TLV (ACGIH) 0.1 mg/m3 TWA as persulfate

- Potassium sulfate
  No applicable data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
  Physical state: solid
  Form: powder
  Color: yellow

Odor: pleasant, sweet

Odor threshold: No applicable data available.

pH: 2.4 - 2.7

Melting point/range: No applicable data available.

Boiling point/boiling range: No applicable data available.

Flash point: does not flash
Evaporation rate : No applicable data available.

Flammability (solid, gas) : No applicable data available.

Upper explosion limit : No applicable data available.

Lower explosion limit : No applicable data available.

Vapour Pressure : No applicable data available.

Vapour density : No applicable data available.

Specific gravity (Relative density) : 1.07

Water solubility : 65 g/l at 20 ºC (68 ºF)

Solubility(ies) : No applicable data available.

Partition coefficient: n-octanol/water : No applicable data available.

Auto-ignition temperature : No applicable data available.

Decomposition temperature : No applicable data available.

Viscosity, kinematic : No applicable data available.

Viscosity, dynamic : No applicable data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No applicable data available.

Chemical stability : No applicable data available.

Possibility of hazardous reactions : No applicable data available.

Conditions to avoid : Protect from moisture.
Incompatible materials: Strong bases, combustibles, Acids, oxidizers, Brass, Copper, Halogenated compounds, Cyanides, Heavy metal salts

Hazardous decomposition products: Sulphur dioxide, Chlorine

SECTION 11. TOXICOLOGICAL INFORMATION

Virkon™ S

Inhalation 4 h LC50: 3.7 mg/l, Rat
Dermal LD50: 2,200 mg/kg, Rat
Oral LD50: 4,123 mg/kg, Rat
Skin irritation: Irritating to skin. Moderate skin irritation
Eye irritation: Risk of serious damage to eyes.
Sensitisation: Animal test did not cause sensitization by skin contact., Maximisation Test (GPMT) Guinea pig

Reproductive toxicity: No toxicity to reproduction

Sulfamic acid
Repeated dose toxicity: Oral Rat
- Method: OECD Test Guideline 408
  No toxicologically significant effects were found.
Mutagenicity: Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Sodium chloride
Repeated dose toxicity: Oral Rat
Due to its physical properties, there is no potential for adverse effects.

Carcinogenicity: Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Teratogenicity: Animal testing showed no developmental toxicity.

Carcinogenicity
The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION
Aquatic Toxicity
Sulfamic acid

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>96 h LC50</td>
<td>Pimephales promelas (fathead minnow)</td>
<td>70.3 mg/l</td>
<td>OECD Test Guideline 203</td>
<td>Information given is based on data obtained from similar substances.</td>
</tr>
<tr>
<td>72 h ErC50</td>
<td>Desmodesmus subspicatus (green algae)</td>
<td>48 mg/l</td>
<td>OECD Test Guideline 201</td>
<td></td>
</tr>
<tr>
<td>72 h NOEC</td>
<td>Desmodesmus subspicatus (green algae)</td>
<td>18 mg/l</td>
<td>OECD Test Guideline 201</td>
<td></td>
</tr>
<tr>
<td>48 h EC50</td>
<td>Daphnia magna (Water flea)</td>
<td>71.6 mg/l</td>
<td>OECD Test Guideline 202</td>
<td></td>
</tr>
</tbody>
</table>

Sodium chloride
### Environmental Fate

**Sulfamic acid**
- **Biodegradability**: Biodegradable
  - Not applicable

**Sodium chloride**
- **Bioaccumulation**: Bioaccumulation is unlikely.

### SECTION 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods - Product**
- In accordance with local and national regulations. Do not flush into surface water or sanitary sewer system. Do not contaminate water, food or feed by disposal.

**Contaminated packaging**
- No applicable data available.
SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

EPA Reg. No. : 71654-6

In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and is therefore also subject to certain labeling requirements under US pesticide law (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the mandatory hazard information required by USEPA on the pesticide label:

DANGER. Powder is corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles (or face shield). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as water proof gloves). Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Corrosive statement refers to powder only not in use-diluted solution.
SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use Chemours materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from Chemours under a written contract that is consistent with Chemours policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your Chemours representative. You may also request a copy of the Chemours POLICY Regarding Medical Applications and Chemours CAUTION Regarding Medical Applications.

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Revision Date : 04/01/2016

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.

Significant change from previous version is denoted with a double bar.