



## Dry Series Solve 5159

### Material Safety Data Sheet

Date Issued: 04/13/2013

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#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SOLVE 5159**  
COMPANY: WaterSolve, LLC, 5031 68<sup>TH</sup> Street Caledonia, Michigan 49316, USA  
For Product information call 616-575-8693.  
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

*Identification of the preparation:* Cationic water-soluble polymer.

#### 3. HAZARDS IDENTIFICATION

##### Emergency Overview

**Appearance:** Granular solid

**Color:** White

**Odor:** None

*Aqueous solutions or powders that become wet render extremely slippery surfaces.*

#### 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air. No hazards which require special first aid measures.

**Skin Contact:** No hazards which require special first aid measures. Wash off with soap and plenty of water as a precaution. In case of persistent skin irritation, consult a physician.

**Eye Contact:** Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

**Ingestion:** No hazards which require special first aid measures. The product is not considered toxic based on studies on laboratory animals.

#### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** Water, water spray, foam, carbon dioxide (CO<sub>2</sub>), dry powder.

**Special fire-fighting precautions:** Aqueous solutions or powders that become wet produce extremely slippery surfaces.

**Protective equipment for firefighters:** No Special protective equipment required.

**Flash point /Autoignition temperature:** Not applicable

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions:** No special precautions required.
- Environmental precautions:** As with all chemicals products, do not flush into surface water.
- Methods for cleaning up:** Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE**

- Handling:** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hand before breaks and at the end of the workday. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.
- Storage:** Keep in a dry, cool place (0-35° C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Engineering controls:** Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.
- Personal protection equipment**
- Respiratory protection:** In case of insufficient ventilation wear suitable respiratory equipment. Dust safety masks are recommended where concentration of total dust is more than 10 mg/m<sup>3</sup>.
- Hand Protection:** Rubber gloves.
- Eye protection:** Safety glasses with side-shields. Do not wear contact lenses.
- Skin protection:** Chemical resistant apron or protective suit if splashing or contact with solution is likely.
- Hygiene measures:** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Form: granular solid
- Color: white
- Odor: none
- pH: 2.5 – 4.5 @ 5 g/l;
- Melting point: Not applicable
- Flash point (deg.C): Not applicable
- Autoignition temp. (deg.C): Not applicable
- Vapour pressure (mm Hg) Not applicable
- Approx. bulk density: 0.80
- LogPow: 0

**10. STABILITY AND REACTIVITY**

- Stability:** Product is stable. No hazardous polymerization will occur.
- Hazardous decomposition Products:** Thermal decomposition may produce: nitrogen oxides (NO<sub>x</sub>), carbon oxides. (CO<sub>x</sub>) and hydrogen chloride gas..
- Conditions to avoid:** Oxidizing agents may cause exothermic reactions.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

- Oral:** LD50/oral/rat > 5,000 mg/kg  
**Dermal:** The results of testing on rabbits showed this material to be non-toxic even at high dose levels.  
**Inhalation:** The product is not expected to be toxic by inhalation.

**Irritation**

- Skin:** Based on laboratory tests, this product does not cause skin irritation.  
**Eyes:** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctivae effects similar to those which all granular materials have on conjunctivae.  
**Sensitization:** The results of testing on guinea pigs showed this material to be non-sensitizing.  
**Chronic toxicity:** Two year feeding studies on rats did not reveal any adverse health effects. A one-year Feeding study on dogs did not reveal adverse health effects.

**12. ECOLOGICAL INFORMATION**

The effects of this product on aquatic organism are rapidly mitigated through hydrolysis and by the presence of dissolved organic carbon in the aquatic environment.

- Fish:** LC50/Danio rerio/96h =5-10mg/L (OECD203)  
**Algae:** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.  
**Daphnia:** LC50/Daphnia magna / 48 h = 20-50 mg/L (OECD 202)  
**Bioaccumulation:** Does not bioaccumulate.  
**Persistence/degradability:** Not readily biodegradable.

**13. DISPOSAL CONSIDERATIONS**

- Waste from residues/unused products:** In accordance with federal, state and local regulations  
**Contaminated packaging:** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

**14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of the following regulations: DOT, IATA/ICAO , IMDG/IMO.

**15. REGULATORY INFORMATION  
US SARA Reporting Requirements**

**SARA Title III Sections:** SARA (311, 312) **hazard class:** Not concerned

**State Regulations**

**California Proposition 65 Information:** The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product contains the following substance (s) known to the State of California to cause cancer: Acrylamide

**International Inventories**

**European Union (EINECS/ELINCS):** All components of this product are either listed on the inventory or are exempt from listings.

**USA (TSCA):** All components of this product are either listed on the inventory or are exempt from listings.

**Canada (DSL):** All components of this product are either listed on the inventory or are exempt from listings.

**Canada (NDSL):** All components of this product are either listed on the inventory or are exempt from listings.

**Australia (AICS):** All components of this product are either listed on the inventory or are exempt from listings.

**China (IECSC):** All components of this product are either listed on the inventory or are exempt from listings.

**Japan (ENCS):** All components of this product are either listed on the inventory or are exempt from listings.

**Korea(ECL):** All components of this product are either listed on the inventory or are exempt from listings.

**Philippines (PICCS):** All components of this product are either listed on the inventory or are exempt from listings

**16. OTHER INFORMATION**

HMIS & NFPA Ratings	HMIS	NFPA
Health:	1	1
Flammability:	1	1
Reactivity:	0	0
Personal Protection/Special:	B	

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This information is for the specific material described only and may not be valid if the material is used in combination with any other materials or in any process. The user is responsible to determine the completeness of the information and suitability for the user's own particular use. The knowledge and belief of the company, the information is accurate and reliable as of the date indicated but the company makes no express or implied warranty of merchantability for the material or the information. The company makes no express or implied warranty of fitness for a purpose for the material or for the information. Users of any chemical should educate themselves on all aspects of its use by independent investigation of current scientific and medical knowledge that the material can be used safely