



## Solve 9117

# Safety Data Sheet

**Date Issued:** 10/20/2020

**Date Revised:** 05/19/2020

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Solve 9117  
Coagulant

**Company Identification:** WaterSolve, LLC  
5031 68th Street  
Caledonia, Michigan 49316, USA [www.gowatersolve.com](http://www.gowatersolve.com)

**For Product Information:** 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)

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

Use of the Substance/Mixture      Flocculating agent  
Coagulant

### 2. HAZARDS IDENTIFICATION

#### **GHS Classification in accordance with 29 CFR 1910.1200**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom2012).

#### **GHS Label element**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom2012).

#### **Other hazards:**

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture

**Components:** No hazardous ingredients

### 4. FIRST AID MEASURES

**General Advice:** No hazards which require special first aid measures.

**If Inhaled:** If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

**If swallowed:** Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

**In case of Skin Contact:** First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

**In case of Eye Contact:** Remove contact lenses. Protect unharmed eye.

**Most important symptoms and effects, both acute and delayed:** Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways).

**Notes to physician:** No hazards which require special first aid measures.

5. **FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, foam, carbon dioxide (CO<sub>2</sub>) or dry chemical.

**Specific hazards during firefighting:** Do not allow run-off from firefighting to enter drains or water courses.

**Hazardous combustion products:** Ammonia, Carbon dioxide (CO<sub>2</sub>), carbon monoxide, Nitrogen oxides (NO<sub>x</sub>), hydrogen chloride

**Specific extinguishing methods:** Product is compatible with standard fire-fighting agents.

**Further information:** 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.

6. **ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:**

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all applicable federal, state, and local regulations.

**Environmental precautions:**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods and materials for containment and cleaning up:**

Keep in suitable, closed containers, for disposal.

7. **HANDLING AND STORAGE**

**Advice on protection against fire and explosion:**

Normal measures for preventive fire protection.

**Advice on safe handling:**

Eating, drinking, or smoking should be prohibited in the application area. For personal protection see Section 8.

**Conditions for safe storage:**

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations/working materials must comply with the technological safety standards.

**Materials to avoid:**

No materials to be especially mentioned.

**Further information on storage stability:**

No decomposition if stored and applied as directed.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures:** General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Personal protective equipment**

**Respiratory Protection:** No personal respiratory protective equipment normally required.

**Eye protection:** Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

**Skin and body protection:** Wear resistant gloves (consult your safety equipment supplier). Wear as appropriate: Safety shoes.

**Hygiene measures:** General industrial hygiene practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state:	liquid
Color:	Yellow
Odor:	characteristic, amine-like
Odour threshold:	No data available
pH:	5.0-7.0 (77 °F / 25 °C)
Melting point/freezing point:	27 - 32 °F / -3 - 0 °C
Boiling Point/boiling range:	> 212 °F / 100 °C
Flash point:	Does not flash
Evaporation Rate:	similar to water
Flammability (solid, gas):	No data available
Self-ignition:	does not ignite
Upper Explosion Limit:	Not applicable
Lower Explosion Limit:	Not applicable
Vapor Pressure:	2.3 kPa (68 °F / 20 °C)
Relative vapor density:	No data available
Relative density:	1.0-1.2
Density:	ca. 1.09 g/cm <sup>3</sup>
Solubility in Water:	completely miscible
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	log Pow: <0
Decomposition temperature:	> 302 °F / 150 °C
Viscosity, dynamic	ca. 2.250 mPa.s (68 °F / 20 °C)
Viscosity, kinematic	No data available
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

**10. STABILITY AND REACTIVITY**

<b>Reactivity:</b>	No decomposition if stored and applied as directed.
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous reactions:</b>	Product will not undergo hazardous polymerization.
<b>Conditions to avoid:</b>	Excessive heat. Protect from frost, heat, flames, and sparks. Avoid exposure to moisture.
<b>Incompatible Materials:</b>	aluminum, copper, iron, strong mineral acids, strong oxidizing agents
<b>Hazardous decomposition products:</b>	Ammonia, Carbon dioxide (CO <sub>2</sub> ), carbon monoxide, nitrogen oxides (NO <sub>x</sub> ), ammonia, hydrogen chloride, hydrogen chloride gas, hydrogen chloride.

## 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity:**

Not classified based on available information.

### **Product:**

**Acute oral toxicity:** LD50 (Rat): >5,000 mg/kg

**Acute dermal toxicity:** Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

### **Skin corrosion/irritation:**

Not classified based on available information.

### **Product:**

**Result:** Not irritating to skin

### **Serious eye damage/eye irritation:**

Not classified based on available information.

### **Product:**

**Result:** Mildly irritating to eyes.

### **Remarks:**

Unlikely to cause eye irritation or injury.

### **Respiratory or skin sensitization**

#### **Skin sensitization:**

Not classified based on available information.

#### **Respiratory sensitization:**

Not classified based on available information.

### **Product:**

**Result:** Does not cause skin sensitization.

### **Germ cell mutagenicity:**

Not classified based on available information.

### **Carcinogenicity:**

Not classified based on available information.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1 % is on OSHA's list of regulated carcinogens.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity:**

Not classified based on available information.

**STOT – single exposure:**

Not classified based on available information.

**STOT – repeated exposure:**

Not classified based on available information.

**Aspiration toxicity:**

Not classified based on available information.

**Further Information**

**Product:**

Remarks: No data available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

**Toxicity to fish:** LC50 (Danio rerio (Zebra fish): > 10 mg/l  
Exposure time: 96hr.

**Toxicity to daphnia and other**

**Aquatic invertebrates:** EC 50 (Water flea (Daphnia magna)): > 10 mg/l  
Exposure time: 48hr.  
Method: OECD Test Guideline 202

**Ecotoxicology Assessment**

**Acute aquatic toxicity:** Acute aquatic toxicity Category 2; Toxic to aquatic life

**Chronic aquatic toxicity:** Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

**Persistence and degradability**

**Product:**

**Physico-chemical removability:** Remarks: The product can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.

**Bioaccumulative potential:**

No data available

**Mobility in soil:**

No data available

**Other adverse effects:**

**Product:**

**Additional ecological information:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. **DISPOSAL CONSIDERATIONS**

**Disposal methods**

**Waste from residues:** Dispose of in accordance with all applicable local, state and federal regulations. The product should not be allowed to enter drains, water courses or the soil.

**Contaminated packaging:** Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. **TRANSPORT INFORMATION**

**International Regulations**

**IATA-DGE**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied

**National Regulations**

**49 CFR**

Not regulated as a dangerous good

**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.

15. **REGULATORY INFORMATION**

**EPCRA – Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards:** No SARA Hazards

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop. 65** This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

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

DSL:	All components of this product are on the Canadian DSL
AICS:	On the inventory, or in compliance with the inventory
ENCS:	On the inventory, or in compliance with the inventory
KECI:	On the inventory, or in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory
TCSI:	On the inventory, or in compliance with the inventory
TSCA:	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.

## 16. **OTHER INFORMATION**

### **Further Information**

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 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. 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. Both the supplier and manufacturer make no representations and assume no liability for any direct, incidental or consequential damages resulting from its use. Both the supplier and manufacturer make no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. 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. 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. The buyer assumes all responsibility for using and handling the product in accordance with applicable federal, state and local regulations.

### **List of abbreviations and acronyms that could be, but not necessarily are, used in the safety data sheet:**

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

DOT: Department of Transportation

FG: Food grade

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act

GHS: Globally Harmonized System of Classification and Labeling of Chemicals  
H-statement: Hazard Statement  
HMIRC: Hazardous Materials Information Review Commission  
HMIS: Hazardous Materials Identification System  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulation by the “International Air Transport Association” (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI (ICAO): Technical Instructions by the “International Civil Aviation Organization”  
IMDG: International Maritime Code for Dangerous Goods  
ISO: International Organization for Standardization  
logPow: octanol-water partition coefficient  
LCxx: Lethal Concentration, for xx percent of test population  
LDxx: Lethal Dose, for xx percent of test population  
ICxx: Inhibitory Concentration for xx of a substance  
ECxx: Effective Concentration of xx  
N.O.S.: Not otherwise Specified  
NFPA: National Fire Protection Association  
NIOSH: National Institute for Occupational Safety and Health  
OECD: Organization for Economic Co-operation and Development  
OEL: Occupational Exposure Limit  
OSHA: Occupational Safety and Health Administration  
P-Statement: Precautionary Statement  
PBT: Persistent, Bioaccumulative and Toxic  
PMRA: Health Canada Pest Management Regulatory Agency  
PPE: Personal Protective Equipment  
RTK: Right to Know  
STEL: Short-term exposure limit  
SDS Safety Data Sheet  
STOT: Specific Target Organ Toxicity  
TLV: Threshold Limit Value  
TWA: Time-weighted average  
VPVB: Very Persistent and Very Bioaccumulative  
WEL: Workplace Exposure Level  
WHMIS: Workplace Hazardous Materials Information System  
(WAF): water-accommodated fraction