



## Solve 7107

### Safety Data Sheet

Date Issued: 2/17/2017

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#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SOLVE 7107**

COMPANY: WaterSolve, LLC, 5031 68<sup>th</sup> Street Caledonia, MI 49316, USA  
[www.gowatersolve.com](http://www.gowatersolve.com)

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

Recommended use (RU); No information available

Uses advised against: No information available.

**Product is certified to NSF/ANSI Standard 60 MUL=10 mg/L**

#### 2. HAZARDS IDENTIFICATION

##### Classification

**OSHA Regulatory Status:** This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

##### GHS Label elements, including precautionary statements.

The product contains no substances which at their given concentration, are considered to be hazardous to health.

##### EMERGENCY OVERVIEW

Physical State	Color	Appearance	Odor
Liquid	Yellow to amber clear	Clear	amine

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	WEIGHT -%
Polyquarternaryamine (Epichlorohydrin-DMA Copolymer)	42751-79-1	~50%

If CAS number is öroprietaryö, the specific chemical identity and percentage of composition has been withheld as a trade secret.

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes for with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Get medical attention if irritation develops and persists.

**Ingestion:** DO NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with plenty of water and soap for at least 15 minutes. Do not reuse contaminated clothing or shoes without laundering. Get medical attention if pain of irritation persists after washing or if signs and symptoms of overexposure appear.

**Inhalation:** Move to fresh air and watch for delayed reaction. Give artificial respiration if breathing stops and get medical attention. If breathing is difficult, give oxygen. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**

**Acute effects:** May result in mild irritation of a short-term nature for the skin and eyes.

**Chronic effects:** Prolonged or repeated skin exposure may cause dermatitis.

**Note to physicians:** Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

**Extinguishing media**

**Suitable Extinguishing Media:**

This material is not expected to burn unless heated to dryness. Use extinguishing agent suitable for type of surrounding fire: water, foam, carbon dioxide or dry chemical.

**Extinguishing media which must not be used for safety reasons:** No information available

**Special hazards arising from the substance or mixture:**

**Special Hazards:**

Thermal decomposition (as may be experienced in a fire) may produce hydrogen chloride gas or may liberate oxides of nitrogen and carbon. Keep containers cool by spraying with water, if exposed to fire. Spills produce slippery surfaces and could present a physical hazard for firemen.

**Advice for firefighters**

**Firefighting measures**

Firefighters should wear full protective clothing and positive pressure self-contained breathing apparatus when fighting fires near chemicals. Cool exposed containers with water spray after extinguishing fire.

**Special protective equipment for firefighters**

Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

**Explosion data:**

**Sensitivity to Mechanical Impact:** None

**Sensitivity to Static Discharge:** None

**6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions:**

Wear suitable protective clothing and gloves.

**Environmental precautions:**

Avoid runoff to waterways and sewers.

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

**Methods for containment:** Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

**Methods: for cleaning up:**

Clean up spill immediately using inert absorbent materials such as clays, sand, earth or other commercially available dry sweeping compound. Persons performing cleanup work should wear protective equipment and clothing. Dike area around spill immediately to prevent spreading. Avoid runoff into storm sewers and ditches that lead to waterways. Spills of solution are extremely slippery so all residue must be removed promptly. If slippery conditions persist, apply additional dry sweeping compound. Following containment, large spills should be pumped into salvage tanks.

## 7. **HANDLING AND STORAGE**

**Personal Precautionary statements:** Wear suitable protective clothing and gloves.

### **Advice on safe handling**

Use proper precaution in unscrewing plug and/or opening container. Use only in well-ventilated areas. Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing. Wash thoroughly with soap and water after handling. Take off contaminated clothing and wash before reuse. Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, gloves and protective clothing when handling. Use with adequate ventilation and employ respiratory protection where mist or spray may be generated. Ensure that eyewash stations and safety showers are close to the workstation location. Keep container closed when not in use.

### **Conditions for safe storage, including any incompatibilities**

#### **Technical measures and storage conditions**

Keep container tightly closed when not in use. Store in a cool, dry and well ventilated area. Store at 5-30°C (41-86°F) in original closed containers. Avoid storage temperatures below freezing, since product may stratify. Changes in temperature create air pressure changes inside drums. Use proper precaution in unscrewing plug and/or opening container.

#### **Incompatible products**

Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.

## 8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

#### **Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### **Appropriate engineering controls**

**Engineering controls:** Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient. See Section 3 for more information.

### **Individual protection measures, such as personal protective equipment**

**Respiratory protection:** Under most conditions, use adequate general ventilation and protective equipment since volatility and toxicity are very low. If significant vapors, mists or aerosols are present, use NIOSH approved respirator (ANSI Z882.1980) or equivalent that is equipped with a dust/mist cartridge.

**Eye/Face Protection:** Wear chemical splash goggles or safety glasses with side shields. Wear a face shield if the possibility of material splashing or spraying exists. Do not wear contact lenses when working with chemicals. Eyewash and safety shower stations in the work area are recommended.

**Hand protection:** Rubber gloves.

**Skin and body protection:** While there is a possibility of skin contact, use the following protective equipment such as rubber gloves and boots that are impervious to liquid material should be worn.

**Other personal protection data:** Eyewash fountains and safety showers must be easily accessible. Avoid contamination of food, beverage or smoking materials. If clothing is contaminated, wash skin and launder clothing. After handling material and before eating, drinking or smoking, wash face and hands thoroughly with soap and water.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

## 9. **PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

**Physical state:** Liquid

**Color:** Yellow to amber

**Appearance:** clear

**Odor:** amine

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
<b>pH:</b>	5.5 ó 6.5	as is
<b>Melting Point and Freezing:</b>	(-7°C) to 0°C / 19.4 to 32 °F	No information available
<b>Boiling Point/Boiling range:</b>	>100°C / 212 °F	No information available
<b>Flash point:</b>	>100°C / 212°F @ 760 mm Hg	No information available
<b>Evaporation Rate:</b>	Same as water	No information available
<b>Flammability (solid, gas):</b>	Not applicable	No information available
<b>Flammability Limit In Air</b>		
<b>Upper limit:</b>	Not applicable	No information available
<b>Lower limit:</b>	Not applicable .....	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
<b>Vapor Pressure:</b>	58mm Hg @ 38°C	No information available
<b>Vapor Density:</b>	>60 mm	No information available
<b>Specific gravity:</b>	1.12-1.16	No information available
<b>Solubility in Water:</b>	Completely (100%)	No information available
<b>Solubility in other solvents:</b>	No information available	No information available
<b>Partition coefficient: N-octanol/water:</b>	No information available	No information available
<b>Autoignition temperature:</b>	Not applicable	No information available
<b>Decomposition temperature:</b>	No information available	No information available
<b>Kinematic viscosity:</b>	No information available	No information available
<b>Dynamic viscosity:</b>	200 ó 450 cps	No information available

<b>Density:</b>	9.34 ó 9.67 lb/gal
<b>Bulk Density:</b>	No information available
<b>Explosive properties:</b>	No information available
<b>Oxidizing properties:</b>	No information available
<b>Softening point:</b>	No information available
<b>Molecular weight:</b>	No information available
<b>Volatile organic compounds (VOCs) content:</b>	No information available
<b>% Volatile (By Wt):</b>	50%

10. **STABILITY AND REACTIVITY**

**Reactivity:** No information available

**Chemical Stability:** Stable under normal conditions of handling, use and transportation.

**Conditions to avoid:** None

**Possibility of hazardous reactions:** None under normal processing.

**Incompatible materials**

**Materials to avoid:** Strong oxidizers; Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/ degradation.

**Hazardous Decomposition**

**Products:** Thermal decomposition (as may be experienced in a fire) may produce hydrogen chloride gas and /or oxides of nitrogen and carbon.

**Hazardous polymerization:** Hazardous polymerization does not occur.

11. **TOXICOLOGICAL INFORMATION**

**PRINCIPAL ROUTES OF EXPOSURE:** skin, eyes and respiratory tract

**Eye contact:** None expected, but prolonged or repeated eye contact may result in mild irritation and redness of a short-term nature.

**Skin:** None expected, but prolonged or repeated skin contact may result in irritation of a short-term nature.

**Inhalation:** Not considered hazardous under normal conditions of use. Although unlikely to occur, inhalation could result in an adverse reaction to persons previously sensitized to the material.

**Ingestion:** Effects of ingesting small amounts are negligible; ingesting large amounts may injure person slightly.

**Acute toxicity**

**Oral LD50** >2000 mg/kg (rat: estimated)

**Dermal LD50** >2000 mg/kg (rat: estimated)

**Inhalation LC50** No information available

**Information on Toxicological effects**

**Symptoms:** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation**

Testing conducted on rabbits using the Draize technique revealed the material to be mildly irritating to the skin.

**Serious eye damage/eye irritation**

Testing conducted using the Draize technique revealed that the material produces no corneal or iridial effects and only minor conjunctival effects.

**Sensitization**

No information available.

**Germ cell mutagenicity**

This product was negative in the Ames Test. This product was negative in the mouse Micronucleus Test.

**Carcinogenicity**

This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH or OSHA.

**Reproductive toxicity**

No information available.

**Specific target organ toxicity-Single exposure**

No information available.

**Aspiration hazard**

No information available.

**Other information**

Conclusions are drawn from sources other than direct testing.

12. **ECOLOGICAL INFORMATION**

**Ecotoxicity**

The effects of this product on aquatic organisms are rapidly and significantly reduced with the presence of dissolved organic carbon in the aquatic environment.

**Acute aquatic toxicity**

**Fish:** LC50 (96 hour): >10 mg/L ó Zebra Fish (*Danio rerio*)

**Crustacea:** EC50 (48 hour): >10 mg/L-Water flea (*Daphnia magna*)

**Algae/aquatic plants:** No information available

**Persistence and degradability**

**Persistence and degradability** No information available

**Bioaccumulative potential** This product does not bio-accumulate.

**Mobility** No information

**Results of PBT and vPvB assessment**

**PBT and vPvB assessment** No information available.

**Other information:** No other ecological studies have been carried out on this product.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Recycle, if possible. If not, dispose of the waste material in accordance with all applicable federal, state and local laws and regulation regarding health and pollution.

**Contaminated packaging**

Since empty containers retain product residue, follow label warnings even after container is emptied.

**14. TRANSPORTATION INFORMATION**

**DOT** Not regulated

**ICAO/IATA** Not regulated

**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA (United States)**

All ingredients are on the inventory or exempt from listing.

**Australia (AICS)**

All ingredients are on the inventory or exempt from listing.

**Canada (DSL)**

All ingredients are on the inventory or exempt from listing.

**Canada (NDSL)**

None of the ingredients are on the inventory.

**China (IECSC)**

All ingredients are on the inventory or exempt from listing.

**EINECS (European Inventory of Existing Chemical Substances)**

Some ingredients are not on the inventory.

**ELINCS (European List of Notified Chemical Substances)**

None of the ingredients are on the inventory.

**ENCS (Japan)**

All ingredients are on the inventory or exempt from listing.

**South Korea (KECL)**

All ingredients are on the inventory or exempt from listing.

**Philippines (PICCS)**

All ingredients are on the inventory or exempt from listing.

**Legend**

**TSCA-** United States Toxic Substances Control Act Section 8(B) Inventory

**AICS-** Australian Inventory of Chemical Substances

**DSL/NDSL-** Canadian Domestic Substances List/Non-Domestic Substances List

**IECSC-** China Inventory of Existing Chemical Substances

**EINECS/ELINCS-** European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS-** Japan Existing and New Chemical Substances

**KECL-** Korean Existing and Evaluated Chemical Substances

**PICCS-** Philippines Inventory of Chemicals and Chemical Substances

### **U.S. Federal Regulations**

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **SARA Section 311/312 Hazard Categories:**

Acute health hazard:	No
Chronic health hazard:	No
Fire hazard:	No
Sudden release of pressure hazard:	No
Reactive hazard:	No

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subjects to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, part 372.

### **U.S. State Regulations**

**CALIFORNIA PROP 65: WARNING ! This product may contain traces of a substance (s) known to the State of California to cause cancer and/or reproductive toxicity.**

#### **U.S. State Right-to Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations.

<b>NFPA Rating: Health-1</b>	<b>Flammability-0</b>	<b>Instability-0</b>	<b>Special hazard-</b>
<b>HMIS Rating: Health-1</b>	<b>Flammability-0</b>	<b>Physical hazard-0</b>	<b>Personal protection-B</b>

**DATE ISSUED: 2/17/2017**

**DATE REVISED: 2/17/2017**

### **OTHER INFORMATION**

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.

**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