



## Solve 161

### Safety Data Sheet

Date Issued: 03/31/2021  
Date Revised: 06/05/2020

#### 1. IDENTIFICATION

**PRODUCT NAME:** SOLVE 161

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

Use of the Substance/mixture: Water treatment chemical

Recommended restrictions on use:

**COMPANY:** WaterSolve, LLC, 5031 68<sup>th</sup> St. S.E. Caledonia, MI 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. HAZARDS IDENTIFICATION

**GHS Classification**

Serious eye damage/eye irritation; Category 1

**GHS-Labeling**

**Hazard pictograms:**



**Signal Word:** Danger

**Hazard statements:** H318 Causes serious eye damage.

**Precautionary Statements:** **Prevention:** P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:** P302 + P351 + P 338 + P310 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.

**Hazardous components which must be listed on the label:**

68439-50-9 Alcohols, C12-14, ethoxylated  
68551-12-2 Alcohols, C12-16, ethoxylated  
68002-97-1 Alcohols, C10-16, ethoxylated

**Hazard(s) not otherwise classified (HNOC) or not covered/classified by GHS**

**Advice:** Contaminated surfaces will be extremely slippery.

**Potential Environmental effects:** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances/Mixtures**

Mixture

Chemical nature

Anionic polyacrylamide, emulsion.

**Hazardous components**

CHEMICAL NAME	CAS-NO.	CONCENTRATION (%)
Distillates (petroleum), hydrotreated light	064742-47-8	22 - 25%
Alcohols, C10-16, ethoxylated	68002-97-1	0 – 3.5%
Alcohols, C12-14, ethoxylated	68439-50-9	0 – 3.5%
Alcohols, C12-16, ethoxylated	68551-12-2	0 – 3.5%
(Z)-Octadec-9-enylamine, ethoxylated	26635-93-8	1.2 – 1.6%
Ammonium acetate	631-61-8	0 – 10%

Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

**Further Information**

Ammonium acetate is not a GHS hazardous component in this product. It is listed because Ammonium Acetate is an EPA Reportable Quantity (RQ) spill hazard substance. See Section 14 and 15.

4. **FIRST AID MEASURES**

**Description of first aid measures**

**Ingestion:** Rinse mouth with water. Call a physician immediately. DO NOT induce vomiting.

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash immediately with plenty of water. Consult a physician if necessary.

**Eye contact:** Rinse immediately with plenty of water, also under eyelids. Obtain prompt medical consultation, preferably from an ophthalmologist.

**Inhalation:** Remove to fresh air. If breathing is difficult, medical advice is required.

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

Symptoms: No information available.  
Hazards: No information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

Treatment: Symptomatic treatment.

5. **FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use water spray, water mist, carbon dioxide (CO<sub>2</sub>) or dry chemical.

**Unsuitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special Hazards arising from the substance or mixture:** Burning may produce toxic and irritant gases.

**Special protective actions for fire-fighters:** Wear self-contained breathing apparatus and protective suit. Use NIOSH/MSHA approved respiratory protection. For personal protection see Section 8.

**Further information:** In the event of fire, cool tanks with water spray.

6. **ACCIDENTAL RELEASE MEASURES**

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

Where the exposure level is not known, wear approved, positive pressure, self-contained respirator. Where the exposure level is known, wear approved respirator suitable for the level of exposure. For personal protection see Section 8.

**Environmental precautions**

Should not be released into the environment.

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

Sweep up to prevent slipping hazard. Soak up with inert absorbent material. Shovel into suitable container for disposal. Flush with water. Use detergent if needed.

**Additional Advice**

Contaminated surfaces will be extremely slippery.

7. **HANDLING AND STORAGE**

**Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

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

Store in original container.

**Materials for packaging**

Unsuitable material: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment.

**Material to avoid:**

No specific hazards.

**Storage stability:**

Storage temperature: < 89.6 °F

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Components	CAS-No.	Value	From of exposure	Control parameters	Update	Basis
Distillates (petroleum), hydrotreated light	64742-47-8		Vapour	197 ppm 1,200 mg/m <sup>3</sup>		

**Appropriate Engineering controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Ensure that eyewash stations and safety showers are close to the workstation location. Avoid contact with skin and eyes. Do not breathe vapour.  
Ensure adequate ventilation.

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

**Industrial Hygiene**

Keep away from tobacco products. Keep away from food and drink. Wash hands before breaks and immediately after handling the product.

**Respiratory protection:**

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Use NIOSH approved respirators respiratory protection.

**Hand protection**

Glove material: Imperious gloves. Permeability tests are not available for this product.  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

**Eye protection:**

Tightly fitting safety goggles.

**Skin and body protection:**

Chemical resistant protective clothing. Chemical resistant boots.

**Environmental exposure controls:**

No data available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

Physical state: liquid  
 Color: greenish-white  
 Odour: Petroleum distillates  
 Odour Threshold: No data available  
 pH: 6 -9.5  
 Freezing/Melting point: No data available  
 Initial boiling point/range: Similar to water  
 Flash point: > 213.1 °F (closed cup) (Pensky-Martens)  
 Explosive properties:  
     Lower explosion limit: No data available  
     Upper explosion limit: No data available  
     Oxidizing properties: The substance or mixture is not classified as oxidizing.  
 Vapour pressure: No data available  
 Relative Vapor Density: Similar to water  
 Density: 1.03 – 1.06 g/cm<sup>3</sup>  
 Relative density: No data available

Water solubility:	Limited by viscosity
Partition coefficient: n-octanol/water:	Not applicable
Auto-ignition temperature:	No data available
Decomposition temp:	No data available
Viscosity:	
Dynamic	No data available
Kinematic	> 20.5 mm <sup>2</sup> /s (104 °F) > 20.5 mm <sup>2</sup> /s (40 °C)
Oxidizing potential:	The substance or mixture is not classified as oxidizing.
Surface tension:	No data available

## 10. STABILITY AND REACTIVITY

### **Reactivity**

Stable under normal conditions.

### **Chemical stability**

The product is chemically stable.

### **Possibility of hazardous reactions**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Strong under recommended storage conditions.

### **Incompatible materials**

No specific hazards.

### **Hazardous decomposition products**

Carbon dioxide (CO<sub>2</sub>), Carbon monoxide (CO), Ammonia, Nitrogen oxides (NO<sub>x</sub>), or Sulphur oxides (SO<sub>x</sub>)

## 11. TOXICOLOGICAL INFORMATION

### **Information on toxicological effects**

<b>Acute oral toxicity:</b>	Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material. Remarks: estimated LD <sub>50</sub> /Rat/5,000 mg/kg Conclusion: The data is based on the toxicological properties of individual components of the product.
<b>Acute oral toxicity:</b>	<b>Distillates (petroleum), hydrotreated light:</b> LD <sub>50</sub> /Rat/>/5,000 mg/kg
<b>Acute inhalation toxicity:</b>	LC <sub>50</sub> /Rat/4 h/>20mg/l Remarks: estimated
<b>Acute inhalation toxicity:</b>	<b>Distillates (petroleum), hydrotreated light:</b> LC <sub>50</sub> /Rat/4 h/>/5.2 mg/l
<b>Acute dermal toxicity:</b>	LD <sub>50</sub> /Rabbit/> 2,000 mg/kg Remarks: estimated

<b>Acute dermal toxicity:</b>	<b>Distillates (petroleum), hydrotreated light:</b> LD50/Rabbit/>/2,000 mg/kg
<b>Skin corrosion/irritation:</b>	OECD Test Guideline 439/Read across (Analogy) Conclusion: No skin irritation  Rabbit/Draize Test/Read across (Analogy) Conclusion: No skin irritation
<b>Serious eye damage /eye irritation</b>	OECD Test Guideline 437/Read across (Analogy) Conclusion: Causes serious eye damage.
<b>Respiratory or skin sensitization Skin sensitization:</b>	Conclusion: Not sensitizing.
<b>Skin sensitization:</b>	<b>Distillates (petroleum), hydrotreated light:</b> Conclusion: This substance is not classified as a sensitizer.
<b>Germ cell mutagenicity Genotoxicity in vitro</b>	Conclusion: Based on available data, the classification criteria are not met.
<b>Genotoxicity in vitro</b>	<b>Distillates (petroleum), hydrotreated light:</b> Conclusion: No known effect.
<b>Genotoxicity in vivo</b>	<b>Distillates (petroleum), hydrotreated light:</b> Conclusion: not mutagenic
<b>Carcinogenicity Carcinogenicity</b>	<b>Distillates (petroleum), hydrotreated light:</b> Not classified by IARC or NTP.
<b>Reproductive toxicity Toxicity for reproduction</b>	Conclusion: Based on available data, the classification criteria are not met.
<b>Toxicity for reproduction</b>	<b>Distillates (petroleum), hydrotreated light:</b> Conclusion: Did not show teratogenic effects in animal experiments.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

#### Aquatic toxicity

#### Toxicity to other organisms

No data available.

#### Persistence and degradability:

Biological degradability: CO2 Evolution TEST/OECD Test Guideline 301B/28d:

The polymeric ingredient is not readily biodegradable. Because of the high molecular weight of the polymer diffusion through biological membranes is very small.

#### Bioaccumulative potential

Partition coefficient: n-octanol/water: Not applicable

**Mobility in soil**

Water solubility: Limited by viscosity.  
Surface tension: No data available.

**Other adverse effects**

No data is available on the product itself.

**13. DISPOSAL CONSIDERATIONS**

**Product**

Recycling, recovery and reuse of materials is recommended if permitted by regulations. If recycling is not practical, dispose of in compliance with local regulations. Incineration is recommended.

**14. TRANSPORT INFORMATION**

**Land transport**

**DOT:**

**Description of the goods:** NA3082, Other Regulated Substances, Liquid, N.O.S.

**Proper shipping name**

**Class:** 9

**Packaging group:** III

**DOT Labels** 9

**Reportable quantity:** Ammonium acetate  
Hazardous Substances/Reportable Quantities-DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or exceeds the reported quantity. DOT/CFR: Product contains US EPA CERCLA and CWA Hazardous Substances: Ammonium Acetate (CAS# 631-61-8) having a Reportable Quantity (RQ) of 5000 pounds; (refer to SDS section 3 for amount in product to determine if spilled quantity of product exceeds the Reportable Quantity (RQ) triggering EPA Spill Incident Notification).

**Sea Transport**

Not classified as dangerous in the meaning of transport regulations.

**Air transport**

Not classified as dangerous in the meaning of transport regulations.

**Special precautions for user**

This product is regulated as a hazardous material according to the Department of Transportation only in bulk quantities greater than 49,999 lbs. (22,680 KG) per package.

**15. REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA Title III Section 311 Categories:**

Serious Eye damage/eye irritation, Category 1,

**US. Environmental Protection Agency (EPA); Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances as amended by US Federal Register Final Rules.**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 – Specific Toxic Chemical Listings**

While this product does not contain any component CAS numbers directly listed under SARA 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), it does contain ammonia

chemical(s) that may be sources per EPA of aqueous ammonia, a reportable chemical. For our customer's use evaluation for reporting purposes we have listed these source chemical(s) below with their quantities when present at >1%. Please refer to EPA Guidance for Reporting Aqueous Ammonia, EPA 745-R-00-005. Ammonium acetate (631-61-8)  
CERCLA Hazardous Substances. 40 CFR Part 302. May be subject to emergency release notification under SARA Title III.

**CERCLA Hazardous substance (Reportable Quantities)**

Chemical name	CAS-No.	Reportable quantity
Ammonium acetate	631-61-8	5,000 lb

**California Proposition 65**

WARNING: This product contains a chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warning.ca.gov](http://www.P65Warning.ca.gov).  
Acrylamide (79-06-1) < 0.01 %

**Notification status:**

USA: All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.

Canada: All components of this product are included in the Canada Domestic Substances List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).

European Union: All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical Substances (AICS).

China: Contact office for information.

New Zealand: All components of this product are included in the New Zealand Inventory of Chemical Substances (NZIoC) or are not required to be listed on the New Zealand Inventory (NZIoC).

Taiwan: All components of this product are included on the Taiwan Toxic Chemical Substances Control Act Inventory.

**16. OTHER INFORMATION**

**NFPA RATING**

Health:	3
Fire:	1
Reactivity:	0

**HMIS Rating:**

Health:	3
Flammability:	1
Reactivity:	0

**Training advice**

Read the safety data sheet before using this product.



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 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  
SDS: Safety Data Sheet  
STEL: Short-term exposure limit  
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