



Solve 161

Safety Data Sheet

Date Issued: 07/26/2017

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

PRODUCT NAME: **SOLVE 161**

Use of the Substance/mixture: Water treatment chemical

Recommended restrictions on use:

COMPANY: **WaterSolve, LLC, 5031 68th 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

Classification of the substance or mixture

Serious eye damage/eye irritation; Category 1; Causes serious eye damage.

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

Other hazards which do not result in classification

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

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.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, water mist, carbon dioxide (CO₂) 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

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 ³		
		TWA		200 mg/m ³	2006-11-29	CA BC OEL

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

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
pH:	6 -9.5
Freezing point:	-20°C
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
Relative Vapor Density:	Similar to water
Density:	1.03 – 1.06 g/cm ³
Water solubility (ies):	Limited by viscosity
Partition coefficient:	
n-octanol/water:	Not applicable
Decomposition temp:	No data available
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 reactions: Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid: Strong under recommended storage conditions.

Incompatible materials

Material to avoid: No specific hazards.

Hazardous decomposition products

Hazardous decomposition

Products: Carbon dioxide (CO₂)
Carbon monoxide (CO)
Ammonia
Nitrogen oxides (NO_x)
Sulphur oxides (SO_x)

Thermal decomposition: Note: No data available.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity:

Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

Conclusion: The data is based on the toxicological properties of individual components of the product.

Remarks: estimated LD₅₀/Rat/5,000 mg/kg

Acute oral toxicity:

Distillates (petroleum), hydrotreated light:
LD₅₀/Rat/>5,000 mg/kg

Acute inhalation toxicity:

Remarks: estimated LC₅₀/Rat/4h/>20mg

Acute inhalation toxicity:

Distillates (petroleum), hydrotreated light:
LC₅₀/Rat/4h/> 5.2 mg/l

Acute dermal toxicity:

Remarks: estimated LD₅₀/Rabbit/> 2,000 mg/kg

Acute dermal toxicity:

Distillates (petroleum), hydrotreated light:
LD₅₀/Rabbit/> 2,000 mg/kg

Skin corrosion/irritation:

OECD Test Guideline 439/Read across (Analogy)

Conclusion: No skin irritation

Rabbit/Draize Test/Read across (Analogy)

Conclusion: No skin irritation

**Serious eye damage
/eye irritation**

OECD Test Guideline 437/Read across (Analogy)

Conclusion: Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization:

Conclusion: Not sensitizing.

Skin sensitization:

Distillates (petroleum), hydrotreated light:

Conclusion: This substance is not classified as a sensitizer.

Germ cell mutagenicity

Genotoxicity in vitro	Conclusion: Based on available data, the classification criteria are not met.
Genotoxicity in vitro	Distillates (petroleum), hydrotreated light: Conclusion: No known effect.
Genotoxicity in vivo	Distillates (petroleum), hydrotreated light: Conclusion: not mutagenic
Carcinogenicity Carcinogenicity	Distillates (petroleum), hydrotreated light: Not classified by IARC or NTP.
Reproductive toxicity Toxicity for reproduction	Conclusion: Based on available data, the classification criteria are not met.
Toxicity for reproduction	Distillates (petroleum), hydrotreated light: 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

Bioaccumulation is unlikely. Because of the high molecular weight of the polymer diffusion through biological membranes is very small.

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.

EPA Hazardous Waste- NO

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:

Immediate (Acute) Health Effects: Yes

Delayed (Chronic) Health Effects: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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)

Ammonium acetate (631-61-8)

5,000 lb

California Proposition 65

Acrylamide (79-06-1) < 0.01 %

Remarks: This product contains a chemical or chemicals known to the state of California to

cause cancer, birth defects or other reproduction harm.

Notification status:

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

DSL: 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).

EINECS: 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.

AICS: 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).

NZIoC: 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).

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

16. OTHER INFORMATION

NFPA HAZARD RATING (National Fire Protection Association)

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.

Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests.

DATE REVISED: 06/08/2017

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

LC_{xx}: Lethal Concentration, for xx percent of test population

LD_{xx}: Lethal Dose, for xx percent of test population

IC_{xx}: Inhibitory Concentration for xx of a substance

EC_{xx}: 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