



Solve 163

Safety Data Sheet

Date Issued: 04/06/2016

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

PRODUCT NAME: SOLVE 163

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)

Use of the Substance/mixture: Water treatment chemical

Recommended restrictions on use:

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin irritation; Category 2; Causes skin irritation.

GHS-Labeling

Signal Word:

WARNING

Hazard pictograms



Hazard statements:

H315

Causes skin irritation.

Precautionary Statements:

Prevention:

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302 + P352

IF ON SKIN: Wash with plenty of soap and Water.

P332 + P313

If skin irritation occurs: Get medical advice/attention.

P362

Take off contaminated clothing.

Disposal:

P501

Dispose of contents/container as special waste in compliance with local and national regulations.

Other hazards which do not result in classification

Advice: Solutions extremely slippery when spilled.

Inhalation: Avoid breathing vapors or mist.

Skin: Causes skin irritation.

Eyes: May cause eye irritation.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures

Chemical nature

Anionic polyacrylamide in water-in-oil 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 – 3.6%
Alcohols, C12-14, ethoxylated	68439-50-9	0 – 3.6%
Alcohols, C12-16, ethoxylated	68551-12-2	0 – 3.6%
(Z)-Octadec-9-enylamine, ethoxylated	26635-93-8	1.2-1.6%
Ammonium acetate	631-61-8	2-10%

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

General advice: Show this Safety Data Sheet to the doctor in attendance.

Ingestion:

If swallowed, call poison control center or a physician immediately. DO NOT induce vomiting, unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.

Skin contact:

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear. Do not reuse contaminated clothing without laundering

Eye contact:

Rinse immediately and thoroughly with plenty of water for at least 15 minutes, also under eyelids. Obtain prompt medical consultation, preferably from an ophthalmologist.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, carbon dioxide 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: No information available.

Special protective actions for fire-fighters: Firefighters, and others exposed, wear self-contained breathing apparatus. In the event of a fire wear full firefighting protective clothing. Use NIOSH/MSHA approved respiratory protection.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system. In the event of fire, cool containers/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. Use chemical resistant boots. For personal protection see Section 8.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

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. After cleaning, flush away traces with water. Use detergent if needed.

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

Do not freeze. Store at room temperature in the 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		Vapor	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. Avoid contact with skin, eye and clothing. Wash hands and face before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product. Ensure that eyewash stations and safety showers are close to the workstation location. 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. Where respiratory protection is required based on use and conditions, NIOSH approved respirators should be used.

Hand protection

Glove material: Imperious gloves. 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. Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

Skin/body protection:

Chemical resistant protective clothing. Chemical resistant boots. Avoid skin contact.

Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Physical state:	liquid
Color:	white
Odor:	hydrocarbon like
pH:	6-8
Melting Point Range:	-4°C
Initial boiling point/range:	No data available
Flash point:	> 215.6 °F (closed cup) (Pensky-Martens)
Evaporation rate:	similar to water
Explosive properties	
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor pressure:	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
Saturation in air (% vol.):	No data available
Viscosity: Viscosity, kinematic:	> 20.5 mm ² /s (40°C)
Oxidizing potential:	The substance or mixture is not classified as oxidizing.
Surface tension:	Not determined

10. **STABILITY AND REACTIVITY**

Reactivity /Chemical stability

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
Carbon monoxide
Ammonia
Nitrogen oxides (NOx)
Sulphur oxides

Thermal decomposition: Note: No data available.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity:	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:	Remarks: Information given is based on data obtained from similar substances. Conclusion: Irritating to skin.
Serious eye damage /eye irritation	Results: May cause eye irritation. Conclusion: Not classified as irritating for eyes.
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:	Ames Test Conclusion: No data available
Genotoxicity in vitro:	Distillates (petroleum), hydrotreated light: Conclusion: No data available
Genotoxicity in vivo:	Distillates (petroleum), hydrotreated light: Conclusion: No data available
Carcinogenicity:	
Carcinogenicity:	Distillates (petroleum), hydrotreated light: Not classified by IARC or NTP.
Reproductive toxicity	
Toxicity for reproduction:	Distillates (petroleum), hydrotreated light: Conclusion: Did not show teratogenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity

Remarks: Ecotoxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment.

LC50/96h/(*Branchydanio rerio*)Zebra fish/Acute toxicity/OECD Test Guideline 203: >100 mg/l

Remarks: fresh water

EC50/48h/(*Daphnia magna*) Water Flea /immobilization/OECD Test Guideline 202: > 100mg/l

IC50/72h/Green algae (*Selenastrum capricornutum*)/Growth inhibition/OECD Test Guideline 201: >100 mg/l

Remarks: The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by a factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts.

Toxicity to other organisms: No data available.

Persistence and degradability:

Biological degradability: Modified Sturm Test /OECD Test Guideline 301B.

Not readily biodegradable.

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: Not determined

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Product:

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

EPA Hazardous Waste- NO

Contaminated packaging: Dispose of in compliance with local, state and national regulations.

14. TRANSPORT INFORMATION

UN number 3082

Land transport

US DOT:

Description of the goods: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ammonium acetate)

Hazard Class: 9

Packing Group: 111

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)., Hazardous Substances/Reportable Quantities - DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or exceeds the reportable quantity.

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

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. 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.

Other regulations: None

Notification status:

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

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

European Union (EU): 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 (AICA) or are not required to be listed on AICS.

Japan: All components of this product are NOT included on the Japanese (ENCS) inventory.

Korea: All components of this product are NOT included on the Korean (ECL) inventory.

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.

Philippines: All components of this product are NOT included on the Philippine (PICCS) inventory.

Taiwan: All of the components of this product are NOT included on the Taiwan Toxic Chemical Substances Control Act Inventory.

16. OTHER INFORMATION

NFPA HAZARD RATING (National Fire Protection Association)

Health 2- Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire 1 – Materials that must be preheated before ignition can occur.

Reactivity 0 –Materials that in themselves are normally stable, even under fire exposure conditions.

HMIS Rating:

Health: 2

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: 04/21/2015

Revision number: 0

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