



Solve 163

Safety Data Sheet

Date Issued: 03/31/2021

Date Revised: 06/05/2020

1. IDENTIFICATION

PRODUCT NAME: SOLVE 163

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 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

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:

P305 + P351 + P338 + 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 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	64742-47-8	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. Wash off immediately with plenty of water. Wash contaminated clothing before re-use. If a person feels unwell or symptoms of skin irritation appear, consult a physician.

Eye contact:

Rinse immediately 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.

Symptoms: The possible symptoms known are those derived from the labelling (see section 2). No additional symptoms are known

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

Treatment: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

5. **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media:

Use water spray, 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:

No information available.

Special protective actions for fire-fighters:

In the event of a fire wear self-contained breathing apparatus. Use NIOSH/MSHA approved respiratory protection.

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. Chemical resistant boots.

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

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		Vapor	197 ppm 1,200 mg/m ³		

Appropriate Engineering controls:

Avoid contact with skin and eyes. Do not breathe vapour, aerosols. Do not eat, drink or smoke when using this product. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Industrial Hygiene

Handle in accordance with good industrial hygiene and safety practice. 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.

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:

Wear eye/face protection. Tightly fitting safety goggles or face shield. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin/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
Form:	viscous liquid
Color:	white
Odor:	hydrocarbon like
Odor Threshold:	No data available
pH:	6-8
Freezing/Melting Point:	-4°C
Initial boiling point/range:	No data available
Flash point:	> 215.6 °F (closed cup) (Pensky-Martens)
Evaporation rate:	similar to water
Flammability (solid, gas):	Not classified as a flammability hazard
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 Vapour Density:	Similar to water
Density:	9.03 lb/gal
Relative density	No data available
Bulk density:	1.084 kg/m ³
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 ² /s (40°C)
Oxidizing potential:	The substance or mixture is not classified as oxidizing.
Saturation in air (% vol.):	No data available
Surface tension:	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not classified as a reactivity hazard.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Stable under recommended storage conditions.

Incompatible materials

No specific hazards.

Hazardous decomposition products

Carbon dioxide (CO₂), Carbon monoxide (CO), Ammonia, Oxides of nitrogen, Sulphur oxides (SO_x)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity: LD50/Rat > 5,000 mg/kg
Remarks: estimated

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

Acute inhalation toxicity: LC50/Rat/4 h/> 20mg/l
Remarks: estimated

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

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

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:	Ames Test Conclusion: No data available
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:	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:

Modified Sturm Test /OECD Test Guideline 301B.

Not readily biodegradable.

Bioaccumulative potential

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.

Contaminated packaging

Dispose of in compliance with local and national regulations.

14. TRANSPORT INFORMATION

Land transport

DOT:

Description of the goods: NA3082, Other regulated substances, liquid, N.O.S.

Proper shipping name (Ammonium acetate)

Class: 9

Packing 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 reportable 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.

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)

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.P65Warnings.ca.gov.
Acrylamide (79-06-1) < 0.01 %

Other regulations: None

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 in 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).

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

South 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 (NZIoC) or are not required to be listed on the New Zealand Inventory (NZIoC).

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 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