



Solve 9275

Safety Data Sheet

Date Issued: 09/30/2021

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1. **PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier:

Trade name: **Solve 9275**

Details of the supplier of the safety data sheet:

WaterSolve, LLC
5031 68th Street
Caledonia, Michigan 49316, USA

For Product Information: 616-575-8693

Emergency Telephone number:

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: Flocculant

2. **HAZARDS IDENTIFICATION**

GHS Classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Eye irritation: Category 2A

GHS LABEL ELEMENTS

Hazard pictograms:



Signal Word: **WARNING!**

Hazard Statements: H319 Causes serious eye irritation.

Precautionary Statements:

PREVENTION:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/eye protection/face protection.

RESPONSE:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention

OTHER HAZARDS:

Material can create slippery conditions.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture: Mixture

Hazardous Components

Chemical Name	CAS#	Classification	CONCENTRATION %
ALIPHATIC HYDROCARBON	Trade Secret	Flam. Liq. 4; H227 Asp. Tox. 1; H304	>=20 - < 30
ALCOHOL ALKOXYLATES	Trade Secret	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 1.5 - <3

Actual concentration is held as a trade secret

4. **FIRST AID MEASURES**

General Advice: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If swallowed: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

In case of Skin Contact: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

In case of Eye Contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.

If Inhaled: If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist call a physician.

Most important symptoms and effects, both acute and delayed: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, confusion, irregular heartbeat, convulsions. Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Causes serious eye irritation.

Notes to physician: No hazards which require special first aid measures.

5. **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, foam, carbon dioxide (CO₂) or dry chemical.

Unsuitable extinguishing media: High volume water jet.

Specific hazards during firefighting: If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Carbon dioxide (CO₂), carbon monoxide, Hydrocarbons, Nitrogen oxides (NO_x).

Specific extinguishing methods: Product is compatible with standard fire-fighting agents.

Further information: Material may create slippery conditions. Water may cause extremely slippery conditions. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special Protective Equipment for fire-fighters: In the event of fire wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Material can create slippery conditions. Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Comply with all applicable federal, state, and local regulations.

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material, (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Advice on safe handling: Avoid spillage on the floor as product can become very slippery. Do not breathe vapours/dust. Do not smoke. Containers hazardous when empty. Avoid contact with skin and eyes. Smoking, eating, and drinking should be prohibited in the application area. For personal protection see Section 8. Dispose of rinse water in accordance with local and national regulations.

Conditions on safe storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations/working materials must comply with the technological safety standards.

Further information on storage stability: no decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

COMPONENTS	CAS-No.	Value type (form of exposure)	Control parameters/permissible concentration	Basis
ALIPHATIC HYDROCARBON	Trade Secret	TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m ³	OSHA P0

		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL

Engineering measures:

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment**Hand protection:**

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear as appropriate: impervious clothing, safety shoes. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures: Wash hands before breaks and at the end of the workday. When using do not eat or drink. When using do not smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	viscous
Color:	White
Odor:	No data available
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/boiling range:	No data available
Flash point:	> 200.1 °F/93.4 °C
Evaporation Rate:	<1 n-Butyl Acetate
Flammability (solid, gas):	No data available
Self-ignition:	No data available
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapor Pressure:	No data available
Relative vapor density:	No data available
Relative density:	ca. 1
Density:	ca. 1.03 g/cm ³
Solubility in Water:	Soluble
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Decomposition temperature:	No data available
Viscosity, dynamic	<4,000 mPa.s (68 °F/20°C)
Viscosity, kinematic	> 21 mm ² /s (104 °F/40°C)
Oxidizing properties:	Based on a similar product formulation. No data available

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous reactions:	Product will not undergo hazardous polymerization.
Conditions to avoid:	Heat, flames and sparks.
Incompatible Materials:	strong oxidizers agents, strong reducing agents.
Hazardous decomposition Products:	Carbon monoxide, carbon dioxide (CO ₂), nitrogen oxides (NO _x), hydrocarbons

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral Toxicity: LD50 (Mouse): > 5,000 mg/kg

Components:

ALIPHATIC HYDROCARBON:

Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity:

LD50 (Rat, male and female): > 5.28 mg/l

Exposure time: 4 hr.

Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity:

LD50 (Rabbit): > 2,000 mg/kg

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ALCOHOL ALKOXYLATES:

Acute oral toxicity: LD50 (Rat): 1,380 mg/kg

Skin corrosion/irritation

Not classified based on available information

Product:

Remarks: May cause skin irritation in susceptible persons.

Components:

ALIPHATIC HYDROCARBON

Result: Mildly irritating to skin.

ALCOHOL ALKOXYLATES

Result: Not irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Result: Irritating to eyes

Remarks: Causes serious eye irritation.

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.
Causes serious eye irritation.

Components:

ALIPHATIC HYDROCARBON

Result: Mildly irritating to eyes

ALCOHOL ALKOXYLATES

Result: Risk of serious damage to eyes.

Respiratory or skin sensitization

Skin sensitization:

Not classified based on available information

Respiratory sensitization:

Not classified based on available information

Germ cell mutagenicity:

Not classified based on available information

Carcinogenicity:

Not classified based on available information

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity:

Not classified based on available information.

STOT – single exposure:

Not classified based on available information.

STOT – repeated exposure:

Not classified based on available information.

Aspiration toxicity:

Not classified based on available information.

Components:

ALIPHATIC HYDROCARBON:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Further information

Product:

Remarks: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish:

LC50 (Pimephales promelas (Fathead minnow)): 2.18 mg/l

Exposure time: 96 hr.

Test type: static test

Method: OECD Test Guideline 203

GLP: no

Remarks: Test conducted using well water.

LC50 (Danio rerio (Zebra fish)): > 1 – 10 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on a similar product formulation.

LC50 (Cyprinodon variegatus (sheepshead minnow)): > 100 mg/l

Exposure time: 96h

Method: EPA-821-R-02-012

GLP: no

Toxicity to daphnia and other Aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 0.31 mg/l

Exposure time: 48 hr

Test type: static test

Method: OECD Test Guideline 202

GLP: no

Remarks: Test conducted using well water.

EC50 (Daphnia magna (Water flea)): >10 mg/l

Exposure time: 48 hr

Method: OECD Test Guideline 202

Remarks: Based on a similar product formulation.

EC50 (Mysidopsis bahia (opossum shrimp)): 1.15 mg/l

Exposure time: 48 hr

Method: EPA-821-R-02-012

GLP: no

Toxicity to fish (chronic toxicity):

IC25 (Pimephales promelas (fathead minnow)): 5.22 mg/l

End point: Growth rate

Exposure time: 7 d

Method: see user defined free text

NOEC (Pimephales promelas (fathead minnow)): 2.72 mg/l

End point: Growth rate

Exposure time: 7 d

Method: see user defined free text

Toxicity to daphnia and other Aquatic

Invertebrates (chronic toxicity):

IC25 (Daphnia (water flea)): 0.38 mg/l

End point: Reproduction Test

Exposure time: 7 d

Method: see user defined free text

NOEC (Daphnia (water flea)): 0.3 mg/l
End point: Reproduction Test
Exposure time: 7 d
Method: see user defined free text

Toxicity to microorganisms: EC50 (Pseudomonas putida): ca. > 10 mg/l
Exposure time: 48 hr
Remarks: Information given is based on data on the components and the ecotoxicology of similar products.

Ecotoxicology Assessment

Acute aquatic toxicity: Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity: Not classified based on available information.

Components:

ALIPHATIC HYDROCARBON:

Ecotoxicology Assessment

Acute aquatic toxicity: No toxicity at the limit of solubility

Chronic aquatic toxicity: No toxicity at the limit of solubility

ALCOHOL ALKOXYLATES:

Toxicity to fish: LC50 (Fish): > 1 – 10 mg/l
Exposure time: 96 hr
Test Type: static test

Toxicity to daphnia and other

Aquatic invertebrates: EC50 (Daphnia (Water flea)): > 1 – 10 mg/l
Exposure time: 48 hr
Test Type: static test

Toxicity to algae/aquatic plants: ErC50 (green algae): > 0.1 – 1.0 mg/l
Exposure time: 96h
Test Type: static test

Toxicity to daphnia and other Aquatic

Invertebrates (Chronic toxicity): EC50 (Daphnia (Water flea)): 0.17mg/l
Exposure time: 21 d

Ecotoxicology Assessment

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability: Remarks: At natural pHs (>6), the polymer degrades due to the hydrolysis to more than 70% in 28 days.

Biochemical Oxygen Demand (BOD): Biochemical oxygen demand
383,000 mg/l

Chemical Oxygen Demand (COD): 1,930,000 mg/l
Method: Chemical Oxygen demand

Physico-chemical removability: Remarks: The product can be eliminated from water by abiotic processes, e.g., adsorption on activated sludge.

Components:

ALCOHOL ALKOXYLATES:

Biodegradability: Result: Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects:

Product:

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

13. **DISPOSAL CONSIDERATIONS**

Disposal methods:

Waste from residues: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. **TRANSPORT INFORMATION**

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. **REGULATORY INFORMATION**

EPCRA – Emergency Planning and Community Right-to-Know Act

SARA 311/312 Hazards: Serious eye damage or eye irritation

California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

TCSI:	On the inventory, or in compliance with the inventory.
TSCA:	All substances listed as active on the TSCA inventory.
AIIC:	On the inventory, or in compliance with the inventory.
DSL:	The product contains one or more components that are not on the Canadian DSL and have annual quantity limits.
ENCS:	Not in compliance with the inventory.
KECI:	On the inventory, or in compliance with the inventory.
PICCS:	On the inventory, or in compliance with the inventory.
IECSC:	On the inventory, or in compliance with the inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSC 12(b) export notification requirements.

16. OTHER INFORMATION

Further information

Full text of H-Statements

H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
Eye Dam	Serious eye damage
Flam. Liq	Flammable liquids
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	USA. NIOSH Recommended Exposure Limits
OSHA P0	USA. OSHA – Table Z-1 Limits for Air Contaminants – 1910.1000
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
ACGIH / TWA	8-hour, time-weighted average.
NIOSH REL / TWA	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	STEL – 15-minute TWA exposure that should not be exceeded at any time during the workday.
OSHA P0 / TWA	8-hour, time weighted average
OSHA Z-1 / TWA	8-hour time weighted average

Further information:

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 information 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.

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List of abbreviations and acronyms that could be, but not necessarily are, used in the safety data sheet:

AICS: Australian Inventory of Chemical Substances
ASTM: American Society for the Testing of Materials
ACGIH: American Conference of Industrial Hygienists
bw: Body Weight
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
DIN: Standard of the German Institute for Standardization
DSL: Domestic Substances List (Canada)
ECx: Concentration associated with x% response
EmS: Emergency Schedule
ENCS: Existing and New Chemical Substances
ErCx: Concentration associated with x% growth rate response
ERG: Emergency Response Guide
FG: Food grade
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
GLP: Good laboratory practice
H-statement: Hazard Statement
HMIRC: Hazardous Materials Information Review Commission
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA)
IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50: Half maximal inhibitory concentration
ICAO: International Civil Aviation Organization
ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"
IECSC: Inventory of Existing Chemical Substances in China
IMDG: International Maritime Code for Dangerous Goods
IMO: International Maritime Organization
ISHL: Industrial Safety and Health Law (Japan)
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
KECI: Korea Existing Chemicals Inventory
MARPOL: International Convention for the Prevention of Pollution from Ships
MSHA: Mine Safety and Health Administration
n.o.s.: Not otherwise Specified
NFPA: National Fire Protection Association
NO(A)EC: No Observable Effect Loading Rate
NO(A)EL: No Observable (Adverse) Effect Level
NTP: National Toxicology Program
NIOSH: National Institute for Occupational Safety and Health
NOELR: No Observable Effect Loading Rate
NZIoC: New Zealand Inventory of Chemicals
OECD: Organization for Economic Co-operation and Development
OPPTS: Office of Chemical Safety and Pollution Prevention
OEL: Occupational Exposure Limit
OSHA: Occupational Safety and Health Administration
P-Statement: Precautionary Statement
PBT: Persistent, Bioaccumulative and Toxic
PICCS: Philippines Inventory of Chemicals and Chemical Substances
PMRA: Health Canada Pest Management Regulatory Agency
PPE: Personal Protective Equipment
Q SAR: (Quantitative) Structure Activity Relationship
RCRA: Resource Conservation and Recovery Act
REACH: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals
RQ: Reportable Quantity
RTK: Right to Know
SADT: Self Accelerating Decomposition Temperature
SARA: Superfund Amendments and Reauthorization Act
STEL: Short-term exposure limit
SDS Safety Data Sheet
STOT: Specific Target Organ Toxicity
TCSI: Taiwan Chemical Substance Inventory
TSCA: Toxic Substances Control Act (United States)
TLV: Threshold Limit Value
TWA: Time-weighted average
UN: United Nations
UNRTDG: United Nations Recommendations on the Transport of Dangerous Goods
vPvB: Very Persistent and Very Bioaccumulative
WEL: Workplace Exposure Level
WHMIS: Workplace Hazardous Materials Information System
(WAF): water-accommodated fraction