



Solve 9244

Safety Data Sheet

Date Issued: 03/26/2021

Date Revised: 03/11/2021

1. IDENTIFICATION

Product identifier

Trade Name:

Solve 9244

Company Identification:

WaterSolve, LLC
5031 68th Street
Caledonia, Michigan 49316, USA
www.gowatersolve.com

For Product Information:

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)

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture: Flocculating agent

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION in accordance with 29 CFR 1910.1200

Eye irritation: Category 2A

GHS LABEL ELEMENT

Hazard pictograms:



Signal Word:

WARNING!

Hazard Statements:

H319 Causes serious eye irritation.

Precautionary Statements:

PREVENTION:

P264 Wash skin thoroughly after handling.

P280 Wear 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:

None known.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture: Mixture

Chemical nature: Static accumulator

Components

| Chemical Name | CAS-No. | 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 - < 5 |

Actual concentration is withheld 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 eyes 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, consult a physician.

Most important symptoms and effects, both acute and delayed:

Causes serious eye irritation. 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 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.

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 product 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 hear 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: 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 a fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Persons not wearing protective equipment should be excluded from area of spill until clean-up 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: Do not breathe vapors/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 for 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.

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:

Material: Impervious gloves.

Remarks: 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 |
| Odour: | Mild, hydrocarbon-like |
| Odour threshold: | No data available |
| pH: | ca. 3.7 (68°F / 20°C) Concentration: 10 g/l |
| Melting point/freezing point: | <5 °F / -15 °C |
| Boiling Point/boiling range: | 217 °F/ 103 °C |
| Flash point: | >212 °F /> 100 °C |
| Evaporation Rate: | <1 |
| Flammability (Solid, gas): | No data available |
| Self-ignition: | No data available |
| Upper explosion limit/Upper Flammability limit: | No data available |
| Lower explosion limit/Lower Flammability limit: | No data available |
| Vapour Pressure: | 23.3 hPa (68 °F/20 °C) Method : ASTM D 2879-86 |
| Relative vapour density: | No data available |
| Relative density: | 1.03 – 1.04 |
| Density: | ca. 103 g/cm ³ |
| Solubility(ies) | |
| Water Solubility: | soluble |
| Solubility in other solvents: | No data available |
| Partition coefficient (n-octanol/water): | No data available |
| Decomposition temperature: | No data available |
| Viscosity | |
| Viscosity, dynamic | No data available |
| Viscosity, kinematic | >20.5 mm ² /s (104°F / 40°C) Based on a similar product formulation. |
| Oxidizing properties: | No data available |

10. STABILITY AND REACTIVITY

Reactivity: No decompositions 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 oxidizing agents, strong reducing agents. |
| Hazardous decomposition products: | Carbon dioxide (CO ₂), carbon monoxide, hydrocarbons, nitrogen oxides (NO _x) |

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Not classified based on available information.

Components:

ALIPHATIC HYDROCARBON:

Acute oral Toxicity: LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity: LC 50 (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: LD 50 (Rabbit): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ALCOHOL ALKOXYLATES:

Acute oral toxicity: LD 50 (Rat): 1,380 mg/kg

Skin corrosion/irritation:

Not classified based on available information.

Product:

Result: Possibly irritating to skin

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:

Remarks: Vapors 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)): 35.9 mg/l
Exposure time: 96h

Remarks: Test conducted using environmentally representative water.

**Toxicity to daphnia and other
Aquatic invertebrates:**

EC50 (Ceriodaphnia dubia (water flea)): 1.08 mg/l
Exposure time: 48 h
Remarks: Test conducted using environmentally representative water.

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: 96h
Test Type: static test
Toxicity to daphnia and other
Aquatic invertebrates: EC50 (Daphnia (water flea)): > 1 – 10 mg/l
Exposure time: 48h
Test Type: static test
Toxicity to algae/aquatic plants: ErC50 (green algae): >0.1 – 1.0 mg/l
Exposure time: 96 h
Test Type: static test
Toxicity to daphnia and other
Aquatic invertebrates
(chronic toxicity): EC50 (Daphnia (water flea)): 0.17 mg/l
Exposure time: 21d

Ecotoxicology Assessment

Chronic aquatic toxicity Harmful to aquatic life with long lasting effects

Persistence and degradability

Product:

Biochemical Oxygen Demand (BOD): Biochemical oxygen demand
383,000 mg/l
Chemical Oxygen Demang (COD): 1,930,000 mg/l
Method: Chemical oxygen demand

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.

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

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

SARA 313:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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:

| | |
|--------|--|
| DSL: | This product contains one or more components that are not on the Canadian DSL and have annual quantity limits. |
| AICS: | On the inventory, or in compliance with the inventory. |
| 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. |
| TCSI: | On the inventory, or in compliance with the inventory. |
| TSCA | All substances listed as active on the TSCA inventory. |

TSCA List:

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 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 a workday |
| OSHA P0/TWA | 8-hour time weighted average |
| OSHA Z-1/TWA | 8-hour time weighted average |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; 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; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); 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 Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (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, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - SelfAccelerating Decomposition Temperature; SARA - Superfund Amendments and

Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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.