



Solve 9403

Safety Data Sheet

Date Issued: 10/19/2020

Date Revised: 01/04/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Solve 9403

Use of Substance/Mixture: Flocculating agent

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)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Combustible Dust

GHS Label element

Signal word: Warning

Hazard statements: May form combustible dust concentrations in air.

Other hazards: None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Hazardous components

Chemical Name	CAS No.	Classification	Concentration (%)
AMIDE	Trade Secret	Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).	>=5 - < 10

4. FIRST AID MEASURES

General Advice: No hazards which require special first aid measures.

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: Remove contact lenses. Protect unharmed eye.

If Inhalation: Move to 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: irritation (nose, throat, airways).
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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.

Specific hazards during firefighting: Organic dusts at sufficient concentration can form explosive mixtures in air. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:

Carbon dioxide (CO₂), carbon monoxide, Nitrogen oxides (NO_x), acid vapors, ammonia

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 fire, wear self-contained breathing apparatus.

6. **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Avoid breathing dust. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all 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:

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers, for disposal.

7. **HANDLING AND STORAGE**

Advice on protection against fire and explosion:

Take measures to prevent the buildup of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed.

Advice on Safe handling:

Avoid dust formation. Eating, drinking, or smoking should be prohibited in the application area. For personal protection (see Section 8).

Conditions for Safe storage:

Containers which are opened must be carefully resealed and kept upright to prevent leakage. No smoking. Electrical installations/working materials must comply with the technological safety standards.

Materials to avoid: No materials to be especially mentioned.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters/Permissible concentration	Basis
AMIDE	Trade Secret	TWA	10 mg/m ³	US WEEL

Engineering measures:

Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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

Respiratory protection:

No personal respiratory protective equipment normally required.

Eye protectio

Safety glasses.

Skin and body protection

Wear as appropriate: safety shoes. Wear resistant gloves (consult with your safety equipment supplier).

Hygiene measures: Avoid breathing dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	powder
Color:	White, light yellow
Odor:	slight, amine-like
Odor threshold:	No data available
pH:	(ca.) 4 (20°C) 1 % solution
Melting point/freezing point:	Not applicable
Boiling Point/boiling range:	Not applicable
Flash point:	> 200°C
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Self-ignition:	No data available
Upper explosion limit:	No data available
Lower explosion limit:	30,000 mg/m ³
Vapour pressure:	No data available
Relative vapour Density:	No data available
Relative density:	No data available
Density:	ca. 0.72 g/cm ³
Bulk Density:	620 kg/m ³ (20°C)
Solubility in Water:	Soluble
Solubility in other solvents:	No data available
Partition coefficient: n- Octanol/water:	No data available
Auto-ignition temperature:	>400 °C

Thermal decomposition:	> 150 °C
Viscosity, dynamic	c.a. 475 mPa.s (20°C)
Viscosity, kinematic:	No data available
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:	Keep away from heat, flames, sparks and other ignition sources.
Incompatible Materials:	Chlorine, nitrates, acids, Strong oxidizing agents, strong bases
Hazardous decomposition products:	Acid vapors, carbon dioxide (CO ₂), carbon monoxide, nitrogen oxides (NO _x), ammonia

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not classified based on available information.

Product:

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

Skin corrosion/irritation:

Not classified based on available information.

Product:

Result: Not irritating to skin.

Components:

AMIDE:

Result: Not irritating to skin

Serious eye damage/eye irritation:

Not classified based on available information.

Product:

Result: Mildly irritating to eyes

Remarks: Unlikely to cause eye irritation or injury.

Product dust may be irritating to eyes, skin and respiratory system.

Components:

AMIDE:

Result: Not irritating to eyes

Respiratory or skin sensitization:

Skin sensitization:

Not classified based on available information

Respiratory sensitization:

Not classified based on available information

Product:

Species: Guinea pig

Method: OECD Test Guideline 406

Germ cell mutagenicity:

Not classified based on available information.

Components:

AMIDE:

Genotoxicity in vitro

Test Type: Ames test
Result: negative

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 identified as a carcinogen or potential carcinogen by OSHA.

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

Further information:

Product:

Remarks: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish:

LC 50 (Danio rerio) (Zebra fish)): > 10 mg/l
Exposure time: 96hr.
Method: OECD Test Guideline 203
Remarks: Based on a similar product formulation.

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

EC50 (Water flea (Daphnia magna)): > 10 mg/l
Exposure time: 48 hr.
Method: OECD Test Guideline 202
Remarks: Based on a similar product formulation.

Toxicity to Microorganisms:

EC 50 (Pseudomonas putida): > 925 mg/l
Remarks: Based on a similar product formulation.

Ecotoxicology Assessment

Acute aquatic toxicity:

Chronic aquatic toxicity:

Acute aquatic toxicity Category 3; Harmful to aquatic life.
Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

Components:

AMIDE:

Toxicity to fish
LC50 (Leuciscus idus (Golden orfe)): > 6,810 mg/L
Exposure time: 96 h

LC 50 (Poecilia reticulata (guppy)): 17,500 mg/L
Exposure time: 96 h

Toxicity to daphnia and other
Aquatic invertebrates:
EC50 (Water flea (Daphnia magna)): 3,910 mg/L
Exposure time: 48 h
Method: Static

Persistence and degradability:

Components:

AMIDE:

Biodegradability:

Remarks: Expected to be ultimately biodegradable

Bioaccumulative potential:

Components

AMIDE:

Bioaccumulation

Species: Green algae (Chlorella fusca vacuolata)
Bioconcentration factor (BCF): 11,700
Exposure time: 24 h
Concentration: 0.05 mg/L
Method: Static

Partition coefficient: n-octanol/water : log Pow : -2.11

Mobility in soil:

No data available

Other adverse effects:

Product:

Additional ecological information: In natural waters, aquatic toxicity is markedly reduced, due to neutralization of cationic charge by adsorption to particles, hydrolysis and dissolved organic carbon.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

General Advice: The product should not be allowed to enter drains, water courses or the soil. 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.

14. TRANSPORT INFORMATION

International Transport Regulations

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /LTD. QTY.
IATA – DGR				Not dangerous goods	
IMDG – Code				Not dangerous goods	

CFR	Not dangerous goods
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***ORM = ORM-D, CBL=COMBUSTIBLE LIQUID**

Marine pollutant	no
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Dangerous goods description (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for description that are specific to the shipment.

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: Combustible Dust

SARA 313 Component(s): 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:

TSCA: On TSCA inventory.
 DSL: All components of this product are on the Canadian DSL.
 AICS: On the inventory, or in compliance with the inventory.
 ENCS: Not in compliance with the inventory.
 KECI: Not in compliance with the inventory.
 CH INV: On the inventory, or in compliance with the inventory.
 IECSC: On the inventory, or in compliance with the inventory.
 TCSI: Not in compliance with the inventory.
 PICCS: On the inventory, or in compliance with the inventory.

Inventories:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

TSCA list

No substances are subject to a Significant New Use Rule.

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. 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. 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
STEL: Short-term exposure limit
SDS: Safety Data Sheet
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
(WAF): water-accommodated fraction