Solve 9410

Safety Data Sheet

Date Issued: 01/22/2016
Date Revised: 01/22/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Solve 9410**
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)

29 CFR 1910. 1200 (OSHA HazCom 2012)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION
Combustible Dust
GHS Label element
Hazard pictograms:
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	254504001-5518	Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)	>= 10.00 - < 15.00

Trade Secret Composition – conceal identity + concentration

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 a drowsy or unconscious person. If possible, do not leave individual unattended. If symptoms persist, call a physician.

In case of Skin Contact: First aid is not normally required. Remove contaminated clothing and shoes without delay. It is recommended that exposed areas be cleaned by washing with soap and water. Do not reuse contaminated clothing without laundering. Get medical attention if irritation develops or persists.

In case of Eye Contact: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

If Inhalation: Move to fresh air. 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), cough, headache, shortness of breath, lung irritation, drowsiness, confusion, dizziness.

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 and carbon monoxide, Nitrogen oxides (NOx), acid vapors, ammonia

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

Further information: Standard procedure for chemical fires. When product is wet it causes a danger for slipping. 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, firefighters, and others exposed, wear self-contained breathing apparatus and protective suit. Wear full firefighting protective clothing. Use NIOSH/MSHA approved respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Avoid breathing dust. Use personal protective equipment. Ensure adequate ventilation. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Material can create slippery conditions. 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. Do not flush into surface water or sanitary sewer system. Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up:

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

Other information: Comply with all applicable federal, state and local regulations.

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. Container hazardous when empty. Provide sufficient air exchange and /or exhaust in work rooms. Do not breathe vapours/dust. This material is slippery when wet. Do not eat, drink or smoke when using this product. For personal protection (see Section 8). Dispose of rinse water in accordance with local and state and national regulations. Handle in accordance with good industrial hygiene and safety prac

CONDITIONS FOR SAFE STORAGE:
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place. No smoking. Keep away from food and drink. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards. Store in original container in a cool, dry ventilated area.

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	254504001-5518	TWA	10 mg/m³ Total particulate	WEEL
COCO DIETHANOLAMIDE	68603-42-9	ST ESL	100 µg/m³	TX ESL
		AN ESL	10 µg/m³	TX ESL

Engineering measures:
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. Provide appropriate exhaust ventilation at places where dust is formed. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Avoid contact with skin and eyes. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection:
In case of vapor formation use a respirator with an approved filter. A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection:
Wear resistant gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection
Safety glasses. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection
Wear as appropriate: safety shoes. Choose body protections according to the amount and concentration of the dangerous substances at the work place. Wear resistant gloves (consult with your safety equipment supplier). Launder clothing before reuse. Discard gloves that show tears, pinholes, or signs of wear.

Hygiene measures: Avoid breathing dust. Wash hands before breaks and at the end of the workday. When using do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	powder
Physical state:	solid
Color:	white, light yellow

Odor:	amine-like
Odor threshold:	No data available
pH:	4, Concentration: 10 g/l (20ºC)
Melting point/freezing point:	Not applicable
Boiling Point boiling range:	Not applicable
Flash point:	Not applicable
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper explosion limit:	No data available
Lower explosion limit:	30,000 mg/m³
Vapour pressure:	No data available
Relative vapour Density:	No data available
Relative density:	No data available
Density:	ca. 0.72 g/cm³
Bulk Density:	ca. 650 kg/m³
Solubility in Water:	Soluble
Solubility in other solvents:	No data available
Partition coefficient: n-Octanol/water:	No data available
Auto-ignition temperature:	> 400 ºC
Thermal decomposition:	> 200 ºC
Viscosity, dynamic	> 550 mPa.s (20ºC)
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, metals, Strong oxidizers agents, strong bases
Hazardous decomposition products:	acid vapors, carbon dioxide and carbon monoxide, nitrogen oxides, ammonia

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: Inhalation, skin contact, eye contact, ingestion
Acute toxicity: Not classified based on available information.
Product:
Acute dermal toxicity: LD50 (Rat): > 2,000 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
Assessment: Did not cause sensitization on laboratory animals.
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
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

Product: No aspiration toxicity classification

Further information
Product: Remarks: No data available

Carcinogenicity:
IARC: Group 2B: Possibly carcinogenic to humans
COCO DIETHANOLAMIDE 68603-42-9
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.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:

Toxicity to fish: LC 50 Zebra fish(*Danio rerio*): 15mg/l
Exposure time: 96hr. Method: OECD Test Guideline 203
Remarks: In natural waters, aquatic toxicity is markedly reduced, due to neutralization of cationic charge by adsorption to particles, hydrolysis and dissolved organic carbon.

LC50 Rainbow trout (Oncorhynchus mykiss): 0.97 mg/l
Exposure time: 96 h Method: OECD Test Guideline 203
Remarks: see user defined free text

Toxicity to daphnia and other aquatic invertebrates: EC50 Water flea (Daphnia magna): > 10 mg/l
Exposure time: 48h Method: OECD Test Guideline 202
Remarks: In natural waters, aquatic toxicity is markedly reduced, due to neutralization of cationic charge by adsorption to particles, hydrolysis and dissolved organic carbon.

Toxicity to algae: Green algae: Test type: Growth inhibition
Remarks: Not applicable

Toxicity to bacteria: EC50 (Pseudomonas putida): > 925 mg/l
Exposure time: 24h
Remarks: Information given is based on data on the components and the ecotoxicology of similar products.

Components:
AMIDE:

Toxicity to fish: LC50 Golden orfe (Leuciscus idus): . 6,810 mg/l
Exposure time: 96 h
LC50 Guppy (Poecilia reticulata): 17,500 mg/l

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

Persistence and degradability:
Products:
Biodegradability: Remarks: Not readily biodegradable
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: 24h Concentration: 0.05 mg/l
Method: Static
Partition coefficient: n-Octanol/water: log Pow: -2.11
Mobility in soil:
Components: No data available
Other adverse effects: No data available
Product:
Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long last effects.

13. DISPOSAL CONSIDERATIONS

Disposal methods:
General Advice: 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. 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 Transport Regulations

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /LTD. QTY.
U.S. DOT -ROAD					Not dangerous goods
U.S. DOT - RAIL					Not dangerous goods
U.S. DOT – INLAND WATERWAYS					Not dangerous goods
TRANSPORT CANADA - ROAD					Not dangerous goods
TRANSPORT CANADA - RAIL					Not dangerous goods
TRANSPORT CANADA – INLAND WATERWAYS					Not dangerous goods
INTERNATIONAL MARITIME DANGEROUS GOODS					Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOC. - CARGO					Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOC. - PASSENGER					Not dangerous goods
MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES					Not dangerous goods

***ORM = ORM-D, CBL=COMBUSTIBLE LIQUID**

Marine pollutant		no

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
CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ (lbs)
DIETHANOLAMIDE	111-42-2	100	934579.43952

SARA 311/312 Hazards: Fire Hazard

SARA 313

Component(s) 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 lll, 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.
AUSTR: On the inventory, or in compliance with the inventory.
ENCS: On the inventory, or in compliance with the inventory.
KECL: On the inventory, or in compliance with the inventory.
PHIL: On the inventory, or in compliance with the inventory.
IECSC: 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), NZloC (New Zealand), PICCS (Philippines), TSCA (USA)

Registration: Trade Secret

Chemical Name	Identification number
AMIDE	254504001-5518

16. OTHER INFORMATION

Full text of H-Statements referred to under Sections 2 and 3.

H402 Harmful to aquatic life.

DATE ISSUED: 01/22/2016 DATE REVISED: 01/22/2016

OTHER 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 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:

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 ñInternational Air Transport Associationò (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 ñInternational Civil Aviation Organizationò
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
NZloC: 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*): w*ater-accommodated fraction*