Solve 9402

Safety Data Sheet

Date Issued: 01/25/2016
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SOLVE 9402**
COMPANY: WaterSolve, LLC, 5031 68TH Street , Caledonia, Michigan 49316, USA
For Product information call 616-575-8693. gowatersolve.com
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 elements
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 ï conceal identity + concentration

4. FIRST AID MEASURES

General advice: No hazards which require special first aid measures.
Skin Contact: If on skin, rinse well with water. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Eye Contact: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

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

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

Most important symptoms: 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) Headache 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.

Unsuitable extinguishing media: High volume water jet.
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, acid vapors, ammonia

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

Special protective equipment for firefighters: In the event of fire, firefighters should wear full protective clothing including self contained breathing apparatus.

Further information: Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions: Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. Wear appropriate protective equipment and clothing during clean-up. Sweep up and collect dry product. Product becomes slippery and difficult to handle when wet: spills are best handled while still dry. Follow all Local, State, Federal and Provincial regulations for disposal.

Methods and material for
Containment and cleaning up: Keep in suitable, closed containers for disposal. Isolate area. Keep unnecessary personnel away.

Other information: Remove spills promptly as they may make floors slippery. Prevent penetration into surface waters, sewers and ground. Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Advice on safe handling: Avoid dust formation. 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. No smoking. Electrical installations/working materials must comply with the technological safety standards. Store product in a clean, dry area. Keep containers tightly closed.

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: 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.

Personal protection equipment

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

Respiratory protection: Use a nuisance dust mask for dusty conditions.

Skin Protection: Wear resistant gloves (consult your safety equipment supplier). Wear as appropriate: Safety shoes, dust impervious protective suit. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Dis card gloves that show tears, pinholes, or signs of wear. Skin contact should be minimized. Impervious gloves (rubber or neoprene) are recommended.

Eye protection: Safety glasses or goggles or face mask.

Hygiene measures: CAUTION: Extreme slipping hazard when wet. Avoid breathing dust. Obey reasonable safety precautions and practice good housekeeping. Before eating, drinking or smoking, wash face and hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	powder
Color:	white, light yellow
Odor:	amine-like
pH:	ca. 4.5, (20°C) 1% solution
Melting Point/Freezing point:	Not applicable
Boiling point/boiling range:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	30,000 mg/m³
Vapor Pressure:	0.00007 hPaCalculated Vapor Pressure
Relative vapor density:	No data available
Relative density:	No data available
Density:	ca. 0.72 g/cm³
Bulk Density:	ca. 620 kg/m³
Solubility (H_2O):	soluble
Solubility in other solvents:	No data available
Partition coefficient n-octanol/water:	No data available
Auto-ignition temperature:	400ºC
Thermal decomposition:	> 150 ºC
Viscosity, dynamic:	ca. 650 mPa.s (20ºC)
Viscosity, kinematic:	No data available
Oxidizing properties:	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:	Keep away from heat, flame, sparks and other ignition sources.
Incompatibility materials:	Acids, chlorine, nitrates, strong bases, strong oxidizing agents.
Hazardous decomposition Products:	Acid vapors, carbon dioxide and carbon monoxide, nitrogen oxides (NOx), 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 oral toxicity:	LD50 (Rat): > 5,000 mg/kg
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

Not classified based on available information.

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.

Acute Oral:	LD50 Mouse Dose: >5000mg/kg Method: OECD 401
Acute Oral:	LD50 Rat Dose: >2000mg/kg OECD 402

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.
Further information
Product:
Remarks: No data available

Carcinogenicity:
IRAC: 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: LC50 Zebra fish (Danio rerio): > 100 mg/l
Exposure time: 96h Method: OECD Test Guideline 203
Remarks: Based on a similar product formulation.

LC50 Rainbow trout (Oncorhynchus mykiss): > 1,000 mg/l
Exposure time: 96h Method: OECD Test Guideline 203

Toxicity to daphnia and other
Aquatic invertebrates: EC50 Water flea (Daphnia magna): > 100 mg/l
Exposure time: 48h Method OECD Test Guideline 202
Toxicity to bacteria: EC50 (Pseudomonas putida): > 925 mg/l
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: 96h

LC50 Guppy (Poecilia reticulate): 17,500 mg/l
Exposure time: 96h

Toxicity to daphnia and other
Aquatic invertebrates: EC50 Water flea (Daphnia magna): 3,910
Exposure time: 48h 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: 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: No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods:

General Advice: Do not dispose of waste into sewer.
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 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 (lbs)	Calculated Product RQ (lbs)
DIETHANOLAMINE	111-42-2	100	934579.439252

SARA 311/312 Hazards: Fire Hazard
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 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), NZIoC (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.

DATE ISSUED: 01/25/2016 DATE REVISED: 01/25/2016
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 userôs 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

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*): w*ater-accommodated fraction*