



Solve 9236

Safety Data Sheet

Date Issued: 05/23/2015

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Solve 9236
Company Identification: WaterSolve, LLC www.gowatersolve.com
5031 68th Street
Caledonia, Michigan 49316, USA

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 Substance/Mixture: Flocculating agent
29 CFR 1910.1200 (OSHA HazCom 2012)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Skin irritation: Category 2
Specific target organ systemic Toxicity – single exposure: Category 3 (Central nervous system)

GHS LABEL ELEMENT



Hazard pictograms:

Signal Word: WARNING!

Hazard Statements: Causes skin irritation.
May cause drowsiness or dizziness.

Precautionary Statements:

PREVENTION: Avoid breathing dust/fume/gas/mist/vapors/spray
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear Protective gloves.

RESPONSE:

IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Get medical advice/attention.

If skin irritation occurs: Take off contaminated clothing and wash before reuse.

STORAGE: Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

DISPOSAL: Dispose of contents/container to an approved waste disposal plant.

OTHER HAZARDS: Static Accumulating liquid

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Static accumulator
Chemical nature: Defatter

Hazardous or Regulated Components

Chemical Name	CAS#	Classification	CONCENTRATION %
ALIPHATIC HYDROCARBON	254504001-5164	Flam. Liq. 4; H227 Skin Irrit. 2; H315 STOT SE 3; H336	26.80

4. FIRST AID MEASURES

General Advice: Move out of dangerous area. Call a POISON CENTRE or doctor/physician if exposed or you feel unwell. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

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: Remove contaminated clothing and shoes without delay. If irritation develop get medical attention. Do not reuse contaminated clothing without laundering.

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 unconscious place in recovery position and seek medical advice. Consult a physician after significant exposure.

Most important symptoms and effects, both acute and delayed:

- 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 (See Section 2 – Swallowing) when deciding whether to induce vomiting.
- 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, drowsiness, confusion, irregular heartbeat, convulsions.
- **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 or dry chemical.

Unsuitable extinguishing media: High volume water jet.

Specific hazards during firefighting:

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:

Carbon dioxide and carbon monoxide, Hydrocarbons, Nitrogen oxides (NOx)

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

Keep containers cool by spraying with water if exposed to fire.

Further information: 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:

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:

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.

Environmental precautions:

Do not let product enter 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:

Keep in suitable, closed containers, for disposal. Soak up with inert absorbent and non-combustible absorbent material, (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information:

Comply with all applicable federal, state and local regulations.

7. HANDLING AND STORAGE

ADVICE ON SAFE HANDLING:

Avoid formation of aerosol. Provide sufficient air exchange and /or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and / or solid), all hazard precautions given in the data sheet must be observed. Avoid exposure-obtain special instructions before use. Avoid contact with skin and eyes. 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. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

CONDITIONS FOR SAFE STORAGE:

Keep container tightly closed in a dry and well-ventilated place. Keep away from food and drink. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards. Store in original container in a cool, dry ventilated area.

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	254504001 -5164	TWL	200 mg/m ³ Non-aerosol (as total hydrocarbon vapor)	ACGIH
		REL	100 mg/m ³	NIOSH/GUIDE

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. 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. Ensure adequate ventilation.

Personal protective equipment:

Respiratory protection:

In case of vapour 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:

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

Eye protection

Wear tightly fitting splash-proof safety goggles or face-shield if there is a potential for exposure of the eyes to liquid, vapor or mist. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection

Wear as appropriate impervious clothing, safety shoes. Wear resistant gloves. Choose body protections according to the amount and concentration of the dangerous substances at the work place. Discard gloves that show tears, pinholes, or signs of wear. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Hygiene measures: 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**

General Information

Physical state:	liquid
Appearance:	viscous
Color:	White
Odor:	hydrocarbon-like
Odour threshold:	No data available
pH:	4 – 5, 1% (as aqueous solution)
Melting point/freezing point:	No data available
Boiling Point boiling range:	No data available
Flash point:	> 212°F/>100°C
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Flammability (liquids):	Static Accumulating liquid
Explosive properties:	No data available
Lower / upper limits:	No data available
Vapor Pressure:	No data available
Relative vapor density:	No data available
Relative density:	1
Density:	Approximate 1.03 g/cm ³
Solubility in Water:	Soluble
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Thermal decomposition:	No data available
Viscosity, dynamic	No data available
Viscosity, kinematic	(>) 20.5 mm ² /s (40°C)
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 oxidizers agents, strong reducing agents
Hazardous decomposition products:	Carbon dioxide, carbon monoxide, hydrocarbons, nitrogen oxides

11. **TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure: Inhalation, skin absorption, skin contact, eye contact, ingestion

Acute toxicity: Not classified based on available information.

Components:

ALIPHATIC HYDROCARBON:

Acute oral Toxicity:	LD 50 Rat: > 5,000 mg/kg
Acute inhalation toxicity:	LD 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
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Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Skin corrosion/irritation:	Causes skin irritation.
Product:	May cause skin irritation and/or dermatitis. Repeated exposure may cause skin dryness or cracking.

Components:

ALIPHATIC HYDROCARBON:

Serious eye damage/eye irritation:	Irritating to skin. Not classified based on available information.
Product:	Vapors may cause irritation to the eyes, respiratory system and the skin.

Components:

ALIPHATIC HYDROCARBON:

Respiratory or skin sensitization:	Mildly irritating to eyes. 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
Reproductive toxicity:	Not classified based on available information
STOT – single exposure:	May cause drowsiness or dizziness.

Components:

ALIPHATIC HYDROCARBON:

STOT – repeated exposure:	May cause drowsiness or dizziness. Not classified based on available information
Aspiration toxicity:	No aspiration toxicity classification.

Further information

Product: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

Carcinogenicity:

IARC: No component of this product presents 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 carcinogen or potential carcinogen by OSHA.

NTP: No component of this product presents 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 fathead minnow (*Pimephales promelas*): 11 mg/l
Exposure time: 48hr.

Toxicity of daphnia and other Aquatic invertebrates: LC 50 Water flea (*Ceriodaphnia dubia*): 1.75 mg/l
Exposure time: 48hr.

Components:

ALIPHATIC HYDROCARBON:

Toxicity to fish: LC 50 Rainbow trout (*Oncorhynchus mykiss*) 2 - 5 mg/l
Exposure time: 96hr. Test Method: semi-static test
Test substance: WAF Method: OECD Test Guideline 203

The information given is based on data obtained from similar substances.

Toxicity of daphnia and other Aquatic invertebrates: EL 50 Water flea (*Daphnia magna*): 1.4 mg/l
Exposure time: 48hr. Test Method: static test
Test substance: WAF Method: OECD Test Guideline 202

The information given is based on data obtained from similar substances.

Toxicity to Algae: EL50 green algae (*Pseudokirchneriella subcapitata*): >1-3 mg/l
Exposure time: 72hr. Test Method: static test
Test substance: WAF Method: OECD Test Guideline 201

The information given is based on data obtained from similar substances.

Toxicity of daphnia and other Aquatic invertebrates (Chronic toxicity) :

NOEL: Species: Water flea (*Daphnia magna*): 0.48 mg/l
Exposure time: 21 d Test Method: semi-static test
Test substance: WAF Method: OECD Test Guideline 211

The information given is based on data obtained from similar substances.

Persistence and degradability

Components:

ALIPHATIC HYDROCARBON:

Biodegradability: Result: Inherently biodegradable
Biodegradation: 58.6% Exposure time: 28 days
Method: OECD Test Guideline 301F

Bioaccumulative potential

Components:

No data available

Mobility in soil

Components:

No data available

Other adverse effects:

No data available

Components:

No data available

Product:

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Components:

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. 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		yes
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Dangerous goods description (if indicated above) may not reflect package size, 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**SARA Hazard Classification****SARA 311/312**

Acute health hazard

SARA 313 Components

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:

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: Not, 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)

Further information

HMIS / NFPA	HEALTH	FLAMMABILITY	REACTIVITY	other
	2	1	0	No data

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

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

H-227 Combustible liquid.
 H315 Causes skin irritation.

DATE ISSUED: 05/23/2015**DATE REVISED: 05/23/2015****Revision number: 1.2****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:

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