



Solve 9290X

Safety Data Sheet

Date Issued: 12/05/2018

Date Revised: 12/29/2017

1. IDENTIFICATION

Product identifier:

Trade Name:

Solve 9290X

Company Identification:

WaterSolve, LLC

5031 68th Street

Caledonia, Michigan 49316, USA www.gowatersolve.com

616-575-8693

For Product Information:

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: Industrial chemical

2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Skin irritation:

Category 2

Eye irritation:

Category 2A

Specific target organ toxicity:

– single exposure:

Category 3 (Central nervous system)

GHS LABEL ELEMENTS

Hazard pictograms:



Signal Word:

Warning

Hazard Statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements:

Prevention:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/face protection.

P280 Wear Protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing . Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up

Disposal:

P501 Dispose of contents/container to an approved waste disposal plant

Other hazards

Static Accumulating liquid

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Hazardous Components

Chemical Name	CAS#	Classification	CONCENTRATION %
ALIPHATIC HYDROCARBON	Trade Secret	Flam. Liq. 4; H227 STOT SE 3; H336	>=20 - < 30
ALCOHOL ALKOXYLATES	Trade Secret	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 1.5 - <5

Trade Secret Composition- Conceal the Identity + Concentration

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.
Do not leave the victim unattended

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
Consult a physician after significant exposure.

In case of skin contact	: Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. Wash contaminated clothing before re-use.
In case of Eye Contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician
Most important symptoms and effects,both acute and delayed	: Inhalation of high concentrations of this material, as could occur in enclosed spaces of 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 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 confusion irregular heartbeat Convulsions Causes skin irritation Causes serious eye irritation. May cause drowsiness or dizziness

Notes to physician: No hazards which require special first aid measures.

5. **FIREFIGHTING MEASURES**

Suitable Extinguishing Media	: Use extinguishing measures that are appropriate to local Circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO ₂) 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 Nitrogen oxides(NO _x) Hydrocarbons

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 firefighters : In the event of fire, wear self-contained breathing apparatus.

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.
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 : Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke
Container hazardous when empty.
Avoid exposure – obtain special instructions before use.
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.
Observe label precautions.
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 Non-aerosol (as 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

Trade Secret Composition – conceal identity + concentration

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

Respiratory protection

: In the case if 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

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.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment Supplier).

Hygiene measures

: Wash hand before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	viscous
Colour:	White
Odour:	hydrocarbon-like
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/boiling range:	No data available
Flash point:	>101°C
Evaporation Rate:	No data available
Flammability (solid,gas):	No data available
Self-ignition	No data available
Upper explosion limit:	7% (V) GLP: Calculated Explosive Limit
Lower explosion limit:	0.6% (V) GLP: Calculated Explosive Limit
Vapor Pressure:	19.3 hPa (20°C) Method: ASTM D 2879-86
Relative vapor density:	No data available
Relative density:	No data available
Density:	Approximate 1.03 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 (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.

11. TOXICOLOGICAL INFORMATION
Information on likely routes of exposure

Inhalation

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

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ALCOHOLS ALKOXYLATES:

Acute oral toxicity: :LD 50 Rat: 1380 mg/kg

Skin corrosion/irritation: Causes skin irritation.

Product

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

ALIPHATIC HYDROCARBON:

Result: Mildly irritating to skin.

ALCOHOLS 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:

Mildly irritating to eyes.

ALCOHOLS ALKOXYLATES:

Risk of serious damage to eyes.

Respiratory or skin sensitization:

Skin sensitization:
Respiratory sensitization:
Germ cell mutagenicity:
Carcinogenicity:
Reproductive toxicity:
STOT – single exposure:

Not classified based on available information
Not classified based on available information
Not classified based on available information
Not classified based on available information
Not classified based on available information
May cause drowsiness or dizziness.

Components:

ALIPHATIC HYDROCARBON:

STOT – repeated exposure:

Aspiration toxicity:

Product:

Further information

Assessment: May cause drowsiness or dizziness.

Not classified based on available information

Not classified based on available information

No aspiration toxicity classification.

Product:

Remarks: **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.**

12. **ECOLOGICAL INFORMATION**

Ecotoxicity

Product:

Toxicity to fish:

: LC 50 (Cyprinodon varigatus (sheepshead minnow)): >100 mg/l
Exposure time: 96 h
Method: EPA-821-R-02-012
GLP: no

LC 50 (Pimephales promelas (fathead minnow)): 26.5 mg/l
Exposure time: 96h
Method: OECD Test Guideline 203
Remarks: Test conducted using environmentally Representative water.

Toxicity of daphnia and other
Aquatic invertebrates:

: EC 50 Water flea (*Ceriodaphnia dubia*): 5.66 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Test conducted using environmentally Representative water.

EC 50 (Mysidopsis bahia (opossum shrimp)): 1.15 mg/l
Exposure time: 48 h
Method: EPA-821-R-02-012
GLP: no

Ecotoxicology Assessment

Acute Aquatic toxicity

: Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity

: Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects

Components:

ALIPHATIC HYDROCARBON:

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 2; toxic to aquatic life with long lasting effects.

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 of daphnia and other aquatic invertebrates: : EC50 (Daphnia) Water flea: > 1 – 10 mg/l
Exposure time: 48h
Test Type: static test

Toxicity of 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

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. Toxic to aquatic life with long lasting effects.**

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 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 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: : Hazard not otherwise classified (physical hazards)
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) 313reporting 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:	: This product contains one or several component that are not on the Canadian DSL nor NDSL .
AICS:	: On the inventory, or in compliance with the inventory.
ENCS:	: On the inventory, or 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.

16. OTHER INFORMATION

Further information

Revision Date: 12/29/2017

Full text of H-Statements

H227	: Combustible liquid.
H302	: Harmful if swallowed.
H315	: Causes skin irritation.
H318	: Causes serious eye damage.
H336	: May causes drowsiness or dizziness.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Eye Dam.	: Serious eye damage
Flam. Liq.	: Flammable liquids
STOT SE	: Specific target organ toxicity – single exposure

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
LC_{xx}: Lethal Concentration, for xx percent of test population
LD_{xx}: Lethal Dose, for xx percent of test population
IC_{xx}: Inhibitory Concentration for xx of a substance
EC_{xx}: 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