



Solve 75215

Safety Data Sheet

Date Issued: 08/19/2015
Date Revised: 08/19/2015

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SOLVE 75215
CHEMICAL TYPE: Mixture
IDENTIFIED USE: Precipitant
COMPANY: WaterSolve, LLC, 5031 68th Street Caledonia, MI 49316, USA
For Product information call 616-575-8693 www.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)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) Skin Irritant 2; Eye Damage 1

Label elements

Hazard Symbol



SIGNAL WORD(S) WARNING

Hazard Statements(s): May cause skin irritation.
May cause eye damage.

Precautionary Statement(s): Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.

IF ON SKIN: Wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Seek medical treatment.

OTHER HAZARDS: Contact with acids liberates very toxic gas. Toxic to aquatic life.

ADDITIONAL INFORMATION: Warning-this preparation contains a substance not yet tested completely. (>10%)

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Ingredients	% wt.	CAS No.
Proprietary hydropolysulfide, carbonothioylbis-, disodium salt solution	Trade Secret	128578-22-3

Additional Information-Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.:

-Contact with acids liberates very toxic gas.: Hydrogen sulfide (H₂S)

4. **FIRST AID MEASURES**

Description of first aid measures

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If symptoms occur obtain medical attention.

Skin Contact: Remove contaminated clothing and shoes and flush affected area with water for at least 15 minutes. Wash affected skin with plenty water. If irritation (redness, rash, blistering) develops get medical attention. Wash or discard contaminated clothing and shoes.

Eye Contact: Rinse eyes cautiously with water for several minutes, while holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion: Immediately rinse mouth with water. **DO NOT** induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed: None anticipated

Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

5. **FIRE-FIGHTING MEASURES**

Extinguishing Media

-Suitable Extinguishing Media: Noncombustible/Non-flammable. As appropriate for surrounding fire.

-Unsuitable Extinguishing Media: As appropriate for surrounding fire.

Special hazards arising from the substance or mixture: None known.

Advice for fire-fighters: A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

6. **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures: Put on protective equipment before entering danger area. Wear protective gloves/protective clothing/eye protection/face protection.

Environmental precautions: Prevent substance entering sewers.

Methods and material for containment and cleaning up: Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference: None

Additional Information: None

7. **HANDLING AND STORAGE**

Precautions for safe handling: Wear protective gloves/protective clothing/eye protection/face protection. Do not mix with: Acids. When using do not eat, drink or smoke.

Conditions for safe Storage, including any incompatibilities:

-storage temperature: No special measures are required.

-Incompatible materials: Contact with acids liberates very toxic gas.

Specific end use(s): Precipitant

8. **EXPOSURE CONTROLS/PROTECTIVE MEASURES**

Occupational Exposure Limits

Contact with acids liberates very toxic gas; Hydrogen sulfide (H₂S)

Substance	CAS No.	(8hr TWA) PEL (OSHA)/ TLV (ACGIH)	STEL PEL (OSHA)/ TLV (ACGIH)	Notes:
Hydrogen sulfide (H ₂ S)	7783-06-4	----- / 1ppm	20ppm (Ceiling)*/5ppm	50ppm(Peak)-10 min.^

^ once, only if no other meas. exp. occurs

Recommended monitoring method: Real-time (electrochemical sensors)

Exposure controls

Appropriate engineering controls: Ensure that the eye flushing systems and safety showers are located close to the working place.

Personal Protection equipment:

Eye Protection: The following to be used as necessary: Goggles giving complete protection to eyes. Full face shield.

Skin Protection hand protection/other: The following to be used as necessary: Gloves (Neoprene or Natural rubber). Chemical protection suit. Wear Safety or chemical resistant shoes or boots. Check with protective equipment manufacture's data.

Respiratory Protection: Normally no personal respiratory protection is necessary, if good ventilation in areas. Otherwise, wear self-contained breathing apparatus (SCBA) in high vapor concentrations.

Ventilation: Always store and use all chemicals in well ventilated areas.

Thermal hazards: Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls: Collect all precipitate. Disposal should be in accordance with local, state, international or national legislation. Wear protective clothing and boots suitable for protection from alkaline products. Provide eye wash and safety shower stations.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance:	liquid
Color:	Yellow
Odor:	sulfur-like
Odor Threshold (ppm):	Not available
pH Value:	12.00 - 12.50
Melting point/ Freezing point °C:	ca. 0(°C) (32°F)
Boiling Point/range °C:	ca. 100 (212°F)
Flash point (°C):	Non-combustible/Non-flammable
Evaporation Rate:	Similar to water
Flammability Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Vapor Pressure (Pascal):	Similar to water
Vapor Density (Air=1):	Similar to water
Density (g/ml):	1.045-1.065
Solubility in Water:	Miscible
Solubility (other):	Not available
Partition Coefficient (n-Octanol/water):	Not available
Auto Ignition Point (°C):	Non-combustible/Non-flammable
Decomposition Temperature (°C):	Not available
Kinematic Viscosity:	Similar to water
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidizing
Other information:	Not available

10. **STABILITY AND REACTIVITY DATA**

Reactivity: stable under normal conditions

Stability: Stable

Possibility of hazardous reactions: Contact with acids liberates very toxic gas.

Conditions to avoid: Incompatible materials

Incompatibility (Materials to Avoid): Acids

Hazardous Decomposition Products: Hydrogen sulfide gas

11. **TOXICOLOGICAL INFORMATION**

Exposure routes: skin contact, eye contact

Acute toxicity: LD50 oral-not determined

LD50 dermal-not determined

Irritation/Corrosivity: Causes skin irritation. Causes serious eye damage.

Sensitization: No information available

Repeated dose toxicity: No information available

Carcinogenicity: No data. It is unlikely to present a carcinogenic hazard to man.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity: No information available

Toxicity for reproduction: No information available

12. **ECOLOGICAL INFORMATION**

Toxicity

Short term: LC50 (96 hour)= 33 mg/L Rainbow trout (*Oncorhynchus mykiss*)

LC50 (96 hour)= 149 mg/L water flea; (*Daphnia magna*)

LC50 (96 hour)= 132 mg/L fathead minnow; (*Pimephales promelas*)

LC50 (48 hour)= 55 mg/L Ide freshwater fish (*Leucisous idus*)

LC50 (48 hour)= 35 mg/L Bluegill (*Lepomis macrochirus*)

Long term: Not available

Persistence and degradability: Not available

Bioaccumulative potential: The product has low potential for bioaccumulation.

Mobility in soil: Not available

Results of PBT and vPvB assessment: Not classified as PBT or vPvB

Other adverse effects: None known

13. **DISPOSAL CONSIDERATIONS**

Waste treatment methods:

Dispose of in accordance with federal, state, international and local environmental laws and legislation.

Consult an accredited waste disposal contractor or the local authority for advice.

14. **TRANSPORTATION INFORMATION**

Land Transport **Sea transport** **Air transport**
(U.S. DOT) **(IMDG)** **(ICAO/IATA)**

UN NUMBER **Not classified as dangerous for transport.**

Proper Shipping name

Transport Hazard Class

Packing Group

Hazard label(s)

Environmental hazards

Special Precautions for user

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

15. **REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substances or mixture:

Toxic Substances Control Act (TSCA): Inventory status: All components listed or polymer exempt.

Designated hazardous substances and reportable quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (pounds)
None	-	-	-

Sec. 311-312: Inventory Reporting-Hazard category:

Fire	Sudden Release	Reactivity	Immediate (acute)	Chronic (delayed)
		x	x	

Sec 313 Toxic chemicals:

Chemical Name	CAS No.	Typical %wt.
None	-	-

Sec. 302 Extremely hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	-	-	-

California Proposition 65 List:

Chemical Name	CAS No.	Type of toxicity
None	-	-

OTHER INFORMATION

HMIS RATINGS: Health=1 Flammability=0, Reactivity=0

HMIS HAZARD INDEX: 0=MINIMAL, 1=SLIGHT, 2=MODERATE, 3=SERIOUS, 4= SEVERE

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

SDS: Safety Data Sheet

STEL: Short-term exposure limit

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