



Solve 5230

Safety Data Sheet

Date Issued: 01/20/2021

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE COMPANY/UNDERTAKING

1.1 PRODUCT NAME: SOLVE 5230

1.2 TYPE OF PRODUCT: Mixture
Relevant identified uses: Processing aid for industrial applications
Use advised against: None

1.3 COMPANY: WaterSolve, LLC
5031 68TH Street
Caledonia, Michigan 49316, USA
For Product information call 616-575-8693
www.gowatersolve.com

1.4 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

2.1 Classification of the substance or mixture

Classification according to paragraph (d) of 29 CFR 1910.1200: Not classified

2.2 Label elements

Label according to paragraph (f) of 29 CFR 1910.1200:

Hazards symbol(s): None
Signal Word: None
Hazard statement(s): None
Precautionary Statements: None

2.3 Other hazards: Aqueous solutions or powders that become wet render surfaces extremely slippery.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Not applicable, this product is a mixture.

3.2 Mixtures:

Hazardous components:

Contains no reportable hazardous substances.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Move to fresh air. No hazards which require special first aid measures.

Skin Contact: Wash off with soap and plenty of water. Get medical attention if skin irritation develops or persists.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids for at least 15 minutes. In case of persistent eye irritation, consult a physician.

Ingestion: Rinse mouth with water. DO NOT induce vomiting. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed.
Powder can cause localized skin irritation in folds of the skin or under tight clothing. Moderate eye irritation due to effects all powders have on conjunctivae.

4.3 Indication of any immediate medical attention and special treatment needed.
None reasonably foreseeable.

Other information: Aqueous solutions or powders that become wet render surfaces extremely slippery.

5. **FIRE FIGHTING MEASURES**

5.1 Extinguishing media

Suitable extinguishing media: Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder
Warning! Aqueous solutions or powders that become wet render surfaces extremely slippery.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce: nitrogen oxides (NO_x), carbon oxides (CO_x). Ammonia (NH₃). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3 Advice for fire-fighters

Protective measures:

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

Other information: Aqueous solutions or powders that become wet render surfaces extremely slippery.

6. **ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:

Aqueous solutions or powders that become wet render surfaces extremely slippery.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures: Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

6.2 Environmental precautions

As with all chemical products, do not flush into surface water.

6.3 Methods and material for containment and cleaning up

Small spills: Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

Large spills: Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

Residues: After cleaning, flush away traces with water.

6.4 Reference to other sections

Section 7: Handling and storage; Section 8: Exposure controls/personal protection; Section 13: Disposal considerations

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Aqueous solutions or powders that become wet render surfaces extremely slippery. Use personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container closed when not in use. Incompatible with strong bases and oxidizing agents.

7.3 Specific end use(s)

This information is not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Occupational exposure limits: None known.

8.2 Exposure controls

Appropriate engineering controls: Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

Individual protection measures, such as personal protective equipment:

- a) Eye/face protection: Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- b) Skin Protection:
 - i) Hand protection: PVC or other plastic material gloves. The selected protective gloves have to satisfy the specification of EU Directive 89/689/EEC and the standard EN 374 derived from it.
 - ii) Other: Workclothes protecting arms, legs, and body. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- c) Respiratory protection: No personal respiratory protective equipment normally required. Dust safety masks recommended where working powder concentration is more than 10 mg/m³. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- d) Additional advice: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and at the end of workday.

Environmental exposure controls: Do not allow uncontrolled discharge of product into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)Appearance:	Granular solid, White
b)Odor:	None
c)Odor threshold:	Not applicable
d)pH:	5-9 @ 5 g/l
e)Melting point/freezing point:	> 150°C
f)Initial boiling point and boiling range:	Not applicable
g)Flash point:	Not applicable
h)Evaporation rate:	Not applicable
i)Flammability (solid, gas):	No data available
j)Upper/lower flammability/explosive limits:	Not expected to create explosive atmospheres
k)Vapor pressure:	Not applicable
l) Vapor density:	Not applicable
m)Relative density:	0.6 – 0.9
n)Solubility(ies):	Soluble in water
o)Partition coefficient:	-2
p)Autoignition temp. (°C):	Does not self-ignite (based on the chemical structure).
q)Decomposition temperature:	> 150°C
r)Viscosity:	See Technical Bulletin.
s)Explosive properties:	Kst=0 Non-flammable to ignition sources of less than 2.5 kJ
t)Oxidizing properties:	Not expected to be oxidizing based on the chemical structure.

9.2 Other information: None

10 STABILITY AND REACTIVITY

10.1 Reactivity: None known.

10.2 Chemical Stability: Stable under normal conditions.

10.3 Possibility of Hazardous reactions: Oxidizing agents may cause exothermic reactions. Contact with strong bases liberates ammonia.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials: Incompatible with oxidizing agents.

10.6 Hazardous decomposition products: Thermal decomposition may produce: nitrogen oxides (NO_x), carbon oxides (CO_x), Ammonia (NH₃). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on the product as supplied:

Acute Oral toxicity:	LD50/oral/rat > 5,000 mg/kg
Acute Dermal toxicity:	LD50/dermal/rat > 5,000 mg/kg
Acute Inhalation toxicity:	The product is not expected to be toxic by inhalation.
Skin corrosion/irritation:	Not irritating
Serious Eye damage/ irritation:	Not irritating
Respiratory/skin Sensitization:	Not sensitizing.
Mutagenicity:	Not mutagenic.
Carcinogenicity:	Not carcinogenic.
Reproductive toxicity:	Not toxic for reproduction.
STOT single exposure:	No known effects.

STOT- repeated exposure: No known effects.
Aspiration hazard: No hazards resulting from the material as supplied.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Information on the product as supplied:

Acute Toxicity to Fish: LC50/Danio rerio/96 hr >100 mg/L (OECD 203)
LC50/Fathead minnow/96 hr >100 mg/L (OECD 203)
Acute Toxicity to invertebrates: EC50/Daphnia magna/48 hr > 100 mg/L (OECD 202)
Acute Toxicity to Algae: IC50/Scenedesmus subspicatus/72 hr > 100 mg/L (OECD 201)
Chronic toxicity to fish: No data available
Chronic toxicity to invertebrates: No data available
Toxicity to microorganisms: No data available
Effects on terrestrial organisms: No known effects.
Sediment toxicity: No data available.

12.2 Persistence and degradability

Information on the product as supplied:

Degradation: Not readily biodegradable.
Hydrolysis: Does not hydrolyse.
Photolysis: No data available

12.3 Bioaccumulative potential

Information on the product as supplied:

Degradation: Not bioaccumulating.
Partition co-efficient (Log pow): -2
Bioconcentration factor (BCF): ~0

12.4 Mobility in soil

Information on the product as supplied:

None.

12.5 Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues /unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in accordance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling: In accordance with local and national regulations.

14. TRANSPORT INFORMATION

Land Transport (DOT) Not classified.
Sea Transport (IMDG) Not classified.
Air Transport (IATA) Not classified.

15. **REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for substances or mixture
Information on the product as supplied:**

TSCA Chemical Substances Inventory:

All components of this product are either listed on the inventory or are exempt from listings.

US SARA Reporting requirements:

SARA (SECTION 311/312) hazard class:

Not concerned

SARA Title III Sections:

Section 302 (TPQ) – Reportable Quantity:

Not concerned.

Section 304 – Reportable Quantity:

Not concerned.

Section 313 (De minimis concentration):

Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) – Reportable Quantity:

Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) – Reportable Quantity:

Not concerned.

CERCLA

Hazardous Substances List (40 CFR 302.4) – Reportable Quantity:

Not concerned.

RCRA Status:

Not RCRA hazardous.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

16. **OTHER INFORMATION**

NFPA and HMIS Ratings:

NFPA:

Health:	0
Flammability:	0
Instability:	0

HMIS:

Health:	0
Flammability:	0
Physical Hazard:	0
PPE Code:	B

Key or legend to abbreviations and acronyms used in the safety data sheet:

Acronyms

STOT = specific target organ toxicity

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 29 CFR 1910.1200

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
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