Smartcide 510

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Smartcide 510

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Smart Chemical Solutions, LLC
3505 Olsen Blvd
Suite 201
Amarillo, TX 79109
T (806) 367-8031

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Respiratory sensitization Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H411 - Toxic to aquatic life with long lasting effects
Precautionary statements (GHS US) : P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P284 - [In case of inadequate ventilation] wear respiratory protection.
P301+P330+P331 - If swallowed: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell. Rinse mouth.
P302+P352 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

20% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
10% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Glutaraldehyde	CAS-No.: 111-30-8	5 – 10
Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides	CAS-No.: 68424-85-1	5 – 10
Ethanol	CAS-no.: 64-17-5	1 – < 3
Other components below reportable levels		80 - < 90

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a doctor.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust/fume/gas/mist/vapors/spray. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Smartcide 510
No additional information available

Glutaraldehyde (111-30-8)
No additional information available

Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides (68424-85-1)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear respiratory protection.

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear.
Color	:	Colorless to light yellow
Odor	:	Fruity
Odor threshold	:	No data available
pH	:	3.5 – 5.5
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	>200°F
Flash point	:	None to boiling
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	1.01
Solubility	:	No data available

Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	2.38 cSt (@71.6°F)
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Causes digestive tract burns. Harmful if swallowed.
Acute toxicity (dermal)	:	Causes severe skin burns.
Acute toxicity (inhalation)	:	May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.

Smartcide 510	
ATE US (oral)	1361.022 mg/kg body weight
ATE US (dust, mist)	0.5 mg/l/4h
Unknown acute toxicity (GHS US)	20% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 10% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Glutaraldehyde (111-30-8)	
LD50 oral rat	200 mg/kg Source: ECHA
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA

Glutaraldehyde (111-30-8)	
LC50 Inhalation - Rat (Vapours)	0.28 – 0.39 mg/l Source: ECHA
ATE US (oral)	200 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.28 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h

Glutaraldehyde (111-30-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Glutaraldehyde (111-30-8)	
LOAEC (inhalation,rat,gas,90 days)	0.25 ppm Animal: rat, Remarks on results: other:
NOAEL (dermal,rat/rabbit,90 days)	150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study), Guideline: EPA OPPTS 870.3250 (Subchronic Dermal Toxicity 90 Days)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Glutaraldehyde (111-30-8)	
Viscosity, kinematic	12.75 mm²/s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm²/s)'

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Glutaraldehyde (111-30-8)	
LC50 - Fish [1]	0.8 mg/l Source: ECHA
EC50 72h - Algae [1]	1.2 mg/l Source: ECHA

Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides (68424-85-1)	
LC50 - Fish [1]	0.51 mg/l Source: The ECOTOXicology database
EC50 - Crustacea [1]	0.0059 mg/l Source: The ECOTOXicology database
EC50 96h - Algae [1]	4.813 mg/l Source: Ecological Structure Activity Relationships

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Glutaraldehyde (111-30-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.36 Source: ECHA

Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides (68424-85-1)	
Partition coefficient n-octanol/water (Log Pow)	3.91 Source: Quantitative Structure Activity Relation

12.4. Mobility in soil

Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides (68424-85-1)	
Mobility in soil	1002 Source: EPI Suite

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

DOT	IMDG	IATA
14.1. UN number		
Not regulated	Not regulated	Not regulated
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Glutaraldehyde	CAS-No. 111-30-8	5 – 10%
Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides	CAS-No. 68424-85-1	5 – 10%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Revision date : 9/18/2025

Full text of H-phrases	
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Safety Data Sheet (SDS), USA