

1. IDENTIFICATION

Product Name: SA-20 Disinfectant
EPA Reg. No.: 10324-94-829
Company: Southern Agricultural Insecticides, Inc
P.O. Box 218
Palmetto, FL 34220
(941) 722-3285
National Pesticide Information Center: (800) 858-7378
Chemtrec (800) 424-9300 (24 hour transportation spill response)
Synonyms: Quaternary ammonium compounds
Dimethyl amine salt of 2,4-dichlorophenoxy acetic acid
Recommended Use: Deodorizer, Fungicide, Mildewstat, Greenhouse Disinfectant

2. HAZARD(S) IDENTIFICATION

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200
Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Skin Corr.Irrit.	1A	Skin corrosion/irritation

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:
H314 Causes severe skin burns and eye damage
H302 Harmful if swallowed.

Precautionary Statements (Prevention):
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe dust or mist.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353 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.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 23 dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 20 oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 20 Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 20 Inhalation - mist

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200 **Emergency overview**

DANGER:

CORROSIVE.

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

CAUSES IRREVERSIBLE EYE DAMAGE.

CAUSES SKIN BURNS.

HARMFUL IF SWALLOWED.

HARMFUL IF ABSORBED THROUGH SKIN.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

3. COMPOSITION/INFORMATION ON INGREDIENTS

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
64-17-5	1.0 - 5.0 %	Ethanol

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
68391-01-5	10.0 %	quaternary ammonium compounds, benzyl-C12-18- alkyldimethyl, chlorides
85409-23-0	10.0 %	Quaternary ammonium compounds, C12-14- alkyl[(ethyl phenyl) methyl] dimethyl, chlorides
64-17-5	<= 80.0	Ethanol Proprietary ingredients

4. FIRST AID MEASURES

Description of first aid measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Most important symptoms and effects, both acute and delayed**Indication of any immediate medical attention and special treatment needed**Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIRE-FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media:
water spray

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, amine derivatives. If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is regulated by CERCLA ('Superfund').

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities

Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage stability:

May be kept indefinitely if stored properly.

If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Ethanol	OSHA PEL	PEL 1,000 ppm 1,900 mg/m ³ ; TWA value
		1,000 ppm 1,900 mg/m ³ ;
	ACGIH TLV	STEL value 1,000 ppm ;

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full face piece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS**

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid	
Odour:	soap-like	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	colourless	
pH value:	7.6	(pH Meter)
	(1 (m), approx. 22°C)	
Freezing point:	approx. 0 °C	
	Information applies to the solvent.	
Boiling range:	approx. 100 °C	
	Information applies to the solvent.	
Flash point:	> 85 °C	(ASTM D56, closed cup)
	No flash point - Measurement made up to the indicated temperature, pilot light extinguishes.	
Lower explosion limit:	4(V)	(air)
Upper explosion limit:	19 (V)	(air)
Vapour pressure:	approx. 23 hPa (20°C)	
	Information applies to the solvent.	
Density:	0.987 g/cm ³ (20°C)	
Vapour density:	not applicable	
Self-ignition temperature:	Based on the water content the product does not ignite.	
Thermal decomposition:	carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide	
	Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.	
Viscosity, dynamic:	15.25 mPa.s (21°C)	(ASTM 02983)
Solubility in water:	fully soluble	
Evaporation rate:	not applicable	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. STABILITY AND REACTIVITY**Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Incompatible materials

anionic substances, oxidizing agents

Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

11. TOXICOLOGICAL INFORMATION

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Slightly toxic after single ingestion. Moderately toxic after short-term skin contact. Moderately toxic after short-term inhalation.

Oral

Type of value: LD50

Species: rat

Value: 1,750 - 5,000 mg/kg

Inhalation

Type of value: LC50

Species: rat

Value: 0.054 - 0.51 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Dermal

Type of value: LD50

Species: rat

Value: 930 mg/kg

Irritation / corrosion

Assessment of irritating effects: May cause moderate but temporary irritation to the eyes.

Corrosive to the skin.

Skin

Species: rabbit

Result: Corrosive.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye

Species: rabbit

Result: non-irritant

Method: EPA Guideline

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

modified Buehler test

Species: guinea pig

Result: Non-sensitizing.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic Toxicity/Effects

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The substance was not mutagenic in a test with mammals.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. No carcinogenic potential can be deduced from other studies with rats and mice.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms.

Toxicity to fish

Highly toxic.

Aquatic invertebrates

Very highly toxic.

Aquatic plants

No data available.

Chronic toxicity to fish

No observed effect concentration 0.53 mg/l, *Pimephales promelas* (static)

Chronic toxicity to aquatic invertebrates

No observed effect concentration 0.047 mg/l, *Mysidopsis bahia* (static)

The ecological data given are those of the active ingredient.

Persistence and degradability

Assessment biodegradation and elimination (H20)

Product is expected to be readily biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

13. DISPOSAL CONSIDERATIONS

Waste disposal of substance:

Pesticide wastes are regulated. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. TRANSPORT INFORMATION

Land transport

USDOT

Hazard class:	8
Packing group:	III
ID number:	UN 3267
Hazard label:	8
Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains QUATERNARY AMMONIUM COMPOUNDS)

Sea transport

IMDG

Hazard class:	8
Packing group:	III
ID number:	UN 3267
Hazard label:	8
Marine pollutant:	NO
Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains QUATERNARY AMMONIUM COMPOUNDS)

Air transport

IATA/ICAO

Hazard class:	8
Packing group:	III
ID number:	UN 3267
Hazard label:	8
Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains QUATERNARY AMMONIUM COMPOUNDS)

Further information

DOT: This product may be classified as ORM-D (Consumer Commodity) or Limited Quantity. After 12/31/2020, ORM-D will not apply.

15. REGULATORY INFORMATION

Federal Regulations

Registration status:
Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute; Chronic; Fire

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CAS Number	Chemical name
64-17-5	Ethanol

Labeling requirements under FIFRA

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

DANGER:
CORROSIVE.
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
CAUSES IRREVERSIBLE EYE DAMAGE.
CAUSES SKIN BURNS.
HARMFUL IF SWALLOWED.
HARMFUL IF ABSORBED THROUGH SKIN.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

16. OTHER INFORMATION

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.