



# Stalwart Herbicide

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

Chemical Name

Mixture

Trade Names

Stalwart Herbicide

CAS No.

Mixture

EPA Identification Number

EPA Reg. No. 60063-24

#### Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)

Herbicide

Uses Advised Against

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### Details of the supplier of the safety data sheet

Company Identification

Sipcam Agro USA, Inc.  
2525 Meridian Parkway, Suite 350  
Durham, NC 27713  
United States of America  
(919) 226-1195

Telephone

#### Emergency telephone number

Emergency Phone No.

CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887  
(Collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Liq. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1

#### Label elements

This chemical is a pesticide product registered by the United States 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 (SDS) and for workplace labels of non pesticide chemicals. The labeling information below applies to non-pesticide workplace labels. For pesticide label information, refer to Section 15.

Hazard Symbol(s)



#### WARNING

Signal Word(s)

Hazard Statement(s)

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Precautionary Statement(s)

Avoid breathing dust/fume/gas/mist/vapours/spray

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

IF IN EYES: Rinse cautiously with water for several minutes.



# Stalwart Herbicide

Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash affected skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

IF INHALED: Get medical advice/attention if you feel unwell.

IF SWALLOWED: Get medical advice/attention if you feel unwell.

## Other hazards

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## Additional Information

None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition/information on ingredients	%W/W	CAS No.	Hazard Statement(s)
Metolachlor	83 - 89	51218-45-2	Flam. Liq. 4; H227 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Proprietary emulsifier	11 - 17	Trade Secret	Skin Irrit. 2; H315 Eye Irrit. 2; H319

**Additional Information** – The exact composition is being withheld as trade secret in accordance with OSHA 29 CFR 1910.1200.

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation

Not normally required. Get medical advice/attention if you feel unwell.

Skin Contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Not normally required. Get medical advice/attention if you feel unwell.

**Most important symptoms and effects, both acute and delayed**

May cause an allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed**

Call a POISON CENTER or doctor/physician if you feel unwell.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.

-Unsuitable Extinguishing Media

Do not use water jet.

# Stalwart Herbicide

## Special hazards arising from the substance or mixture

Combustion or thermal decomposition will evolve toxic and irritant vapours. Forms oxides of carbon and nitrogen, also chlorine and chlorinated compounds. Decontaminate equipment or materials used in pesticide fires.

## Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Do not get in eyes. Avoid contact with skin. Do not breathe mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

### Environmental precautions

Avoid release to the environment.

### Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery. Collect spillage. Wash the spillage area with water. Avoid release to the environment.

### Reference to other sections

None

### Additional Information

None

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not get in eyes. Avoid contact with skin. Do not breathe mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection.

### Conditions for safe storage, including any incompatibilities

#### -Storage temperature

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

#### -Incompatible materials

Strong oxidizing agents. Strong acids / bases.

### Specific end use(s)

Herbicide

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
None	-----	-----	-----	-----	-----	-----

### Exposure controls

#### Appropriate engineering controls

Do **NOT** aerosolize or atomize to produce inhalable-size particles. Use low-pressure coarse spray only.

#### Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



# Stalwart Herbicide

Skin protection (Hand protection/ Other)



Gloves (PVC, Neoprene, or Natural rubber).

Respiratory protection



Not normally required.

Thermal hazards

Not normally required.

## Environmental Exposure Controls

Do not allow to enter drains, sewers or watercourses.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance	Liquid
Color.	Pale brown
Odor	Aromatic
Odor Threshold (ppm)	Not available
pH (Value)	4.94
Melting Point/Freezing Point (°C)	Not available
Boiling point/boiling range (°C)	Not available
Flash Point (°C)	83 (181.4 °F)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Explosive Limit Ranges	Not applicable
Vapour Pressure (mmHg)	Not applicable
Vapour Density (Air=1)	Not available
Density (g/ml)	Not available
Specific Gravity	1.097 (9.15 lb/gal)
Solubility (Water)	488 mg/l @ 25 °C
Solubility (Other)	miscible in various solvents
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	Not available
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	34.12 @ 40 °C
Explosive properties	Not explosive
Oxidizing properties	Combustible; Incompatible with strong oxidizing agents
Other information	Not available

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Hydrolysed by strong alkalis and strong mineral acids.
<b>Possibility of hazardous reactions</b>	None anticipated.
<b>Conditions to avoid</b>	Humidity, high temperatures
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids / bases.
<b>Hazardous decomposition product(s)</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours: acid smoke. Forms oxides of carbon and nitrogen, also chlorine and chlorinated compounds.

# Stalwart Herbicide

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

### Information on toxicological effects

**Acute toxicity**

Oral: LD50 >2000 mg/kg -bw  
Dermal: LD50 >5000 mg/kg -bw  
Inhalation: LC50 >2.08 mg/l (Aerosol), 4-hr. rat

**Irritation/Corrosivity**

Causes skin irritation. Causes serious eye irritation.

**Sensitization**

May cause an allergic skin reaction.

**Repeated dose toxicity**

No data

**Carcinogenicity**

No data

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

**Mutagenicity**

Not to be expected

**Reproductive toxicity**

Not to be expected

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

**Short term**

EC50 (96 hour): 3.9 - 10 mg/L (Fish)  
EC50 (48 hour): 25.1 mg/L (Daphnia magna)  
EC50 (72 hour): <1 mg/L (aquatic plants), estimated.

**Long Term**

NOEC = 0.78 ppm (Fish)

**Persistence and degradability**

Not available

**Bioaccumulative potential**

Not available

**Mobility in soil**

Not available

**Results of PBT and vPvB assessment**

Not available

**Other adverse effects**

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

### Additional Information

None known.

## SECTION 14: TRANSPORT INFORMATION

	Land transport (U.S. DOT) *	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	NA 1993	UN 3082	UN 3082
Proper Shipping Name	Combustible liquid, n.o.s. (Metolachlor)	Environmentally hazardous substance, liquid, n.o.s. (Metolachlor)	
Transport hazard class(es)	Comb. Liq.	9	9
Packing group	III	III	III
Hazard label(s)	Comb. Liq.	Marine Pollutant	Marine Pollutant
Environmental hazards	Yes	Yes	Yes
Special precautions for user	None Assigned	None Assigned	None Assigned

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable

\* Not regulated for ground shipments in the U.S. in non-bulk packaging (<119 gallons).



# Stalwart Herbicide

## SECTION 15: REGULATORY INFORMATION

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

**TSCA (Toxic Substance Control Act)** - Inventory Status: This product is regulated under FIFRA as a pesticide and, therefore, is not subject to TSCA. It is a violation of Federal Law to use this product for purposes other than a pesticide.

**EPA FIFRA Information for SDS Section 15 (Regulatory Information):**

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non pesticide chemicals.

The hazard information required on the pesticide label is reproduced below:

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMAN AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, made of barrier laminate or viton  $\geq$  14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure, and
- Chemical-resistant apron when cleaning equipment, mixing, or loading

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations**

**Users should:**

- Wash hands after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Engineering Control Statements**

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4)). When using the closed system, the PPE requirements for mixers and loaders may be reduced or modified as specified in the WPS.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

**Groundwater Advisory**

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.



# Stalwart Herbicide

## Surface Water Advisory

Metolachlor can contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

## Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

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

**SARA 311/312 - Hazard Categories:** See SECTION 2 - HAZARDS IDENTIFICATION

## SARA 313 - Toxic Chemicals (40 CFR 372):

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

## SARA 302 - Extremely Hazardous Substances(40 CFR 355):

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

## Proposition 65 (California):

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

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1 - 16.

**Date of preparation:** April 14, 2020

**Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:**

### Hazard Statement(s)

- H227: Combustible liquid.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Sipcam Agro USA, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Sipcam Agro USA, Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.