

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Mixture
Trade Names	Stalwart® 2W
CAS No.	Mixture
EPA Identification Number	EPA Reg. No. 60063-63

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 Durham, NC 27713 United States of America
Telephone	(919) 226-1195

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)	Eye Irrit. 2; Skin Sens. 1
-----------------------------	----------------------------

Label elements

This is a pesticide product registered with 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)



Signal Word(s)

WARNING

Hazard Statement(s)

Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary Statement(s)

Avoid breathing mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Wash hands and exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
IF IN EYES: 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.

IF ON SKIN: Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Treat symptomatically. Contaminated clothing should be laundered before reuse.

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice. Observe directions on label and instructions for use. See Also Section 15.

Other hazards
Additional Information

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition/information on ingredients	%W/W	CAS No.	Hazard Statement(s)
Metolachlor	~ 37	51218-45-2	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Mesotrione	~ 4	104206-82-8	Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Proprietary dispersing agent	3.16	Trade Secret	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 2; H401 Aquatic Chronic 3; H412

Additional Information – None

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is laboured, administer oxygen. Call a POISON CENTER/doctor if you feel unwell. Treat symptomatically.
Skin Contact	Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Treat symptomatically. Contaminated clothing should be laundered 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	Do not give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. Rinse mouth.

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
-Unsuitable Extinguishing Media

Special hazards arising from the substance or mixture

Extinguish with carbon dioxide, dry chemical, foam or water spray.
None known.

Combustion or thermal decomposition will evolve toxic and irritant vapours. Forms oxides of carbon and nitrogen, also chlorine and chlorinated compounds and sulfur and sulfur 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, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapours/spray. Wear suitable respiratory protective equipment if exposure to high levels of material are likely.

Environmental precautions

Observe directions on label and instructions for use. See Also Section 15.

Methods and material for containment and cleaning up

Observe directions on label and instructions for use. See Also Section 15.

Reference to other sections

Observe directions on label and instructions for use. See Also Section 15.

Additional Information

None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Observe directions on label and instructions for use. See Also Section 15.

Conditions for safe storage, including any incompatibilities

-Storage temperature
-Incompatible materials

Store at room temperature. Do not allow material to freeze.
Strong oxidising agents. Substances that react with water.

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. Observe directions on label and instructions for use. See Also Section 15.

Personal protection equipment

Eye/face protection



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

Skin protection (Hand protection/ Other)



Gloves. Observe directions on label and instructions for use. See Also Section 15.

Respiratory protection



Observe directions on label and instructions for use. See Also Section 15.

Thermal hazards

Not normally required.

Environmental Exposure Controls

Do not allow to enter drains, sewers or watercourses. Observe directions on label and instructions for use. See Also Section 15.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour.	Off-white
Odour	Slight sweet
Odour Threshold (ppm)	Not available.
pH (Value)	3.35 (1% soln.)
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not available.
Flash Point (°C)	>100
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Explosive Limit Ranges	Not available.
Vapour pressure (Pascal)	2266
Vapour Density (Air=1)	Not available.
Density (g/ml)	1.06
Solubility (Water)	Dispersible
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Point (°C)	Not available.
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (cSt)	> 150 @ 25 °C
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Other information	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Chemical stability

No hazardous reactions known if used for its intended purpose.

Possibility of hazardous reactions

Stable under normal conditions.

Conditions to avoid

None anticipated.

Incompatible materials

Incompatible materials

Strong oxidising agents. Substances that react with water.

Hazardous decomposition product(s)

Combustion or thermal decomposition will evolve toxic and irritant vapours. Forms oxides of carbon and nitrogen, also chlorine and chlorinated compounds and sulfur and sulfur compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Substances

Not applicable

Mixtures

Acute toxicity

Oral: LD50 >2000 mg/kg-bw (rat)
Dermal: LD50 >2000 mg/kg-bw (rat)
Inhalation: LC50 >5 mg/L (rat)

Skin corrosion/irritation

Unlikely to cause skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

STOT - single exposure

Not available.

STOT - repeated exposure

Not available.

Aspiration hazard

Not available.

Substances in preparations / mixtures:

Metolachlor (CAS No. 51218-45-2):

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
No.	No.	No.	No.

Mutagenicity

Not to be expected.

Reproductive toxicity

Not to be expected.

Mesotrione (CAS No. 104206-82-8):

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

Unlikely to cause eye irritation. Unlikely to cause skin irritation.

Sensitization

It is not a skin sensitiser in animal tests.

Repeated dose toxicity

Not to be expected. NOAEL = 71 mg/kg/day (mice)

Carcinogenicity

Not to be expected.

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

Mutagenicity

Not to be expected.

Reproductive toxicity

Not to be expected. NOAEL = 71 mg/kg/day (mice)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Metolachlor (CAS No. 51218-45-2):

Short term	EC50 (96 hour): 3.9 - 10 mg/L (Fish) EC50 (48 hour): 25.1 mg/L (<i>Daphnia magna</i>) EC50 (72 hour): <1 mg/L (aquatic plants), estimated.
Long Term	NOEC (1 - 4 days): 0.038 mg/L (Duckweed)

Mesotrione (CAS No. 104206-82-8):

Short term	LC50 (96 hour): >120 mg/L (fish) EC50 (48 hour): 840 mg/L (<i>Daphnia magna</i>) EC50 (7 days): 0.02 mg/L (Duckweed)
Long Term	EC10 (7 days): 0.0068 mg/L (Duckweed)

Persistence and degradability

Part of the components are poorly biodegradable.

Bioaccumulative potential

Not determined.

Mobility in soil

Not determined.

Results of PBT and vPvB assessment

Not classified as PBT.

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. Observe directions on label and instructions for use. See Also Section 15.

Additional Information

None known.

SECTION 14: TRANSPORT INFORMATION

	Land transport <u>(U.S. DOT)</u> *	Sea transport <u>(IMDG)</u>	Air transport <u>(ICAO/IATA)</u>
UN number	Not classified as dangerous for transport. *	UN 3082	UN 3082
Proper Shipping Name		Environmentally hazardous substance, liquid, n.o.s. (Metolachlor & Mesotrione)	
Transport hazard class(es)		9	9
Packing group		III	III
Hazard label(s)		Marine Pollutant	Marine Pollutant
Environmental hazards		Yes	Yes
Special precautions for user		None Assigned	None Assigned

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

* For bulk shipments in U.S., can be shipped as UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metolachlor & Mesotrione), 9, PG III

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: This is a registered pesticide product regulated under Federal Insecticide, Fungicide, and Rodenticide Act and, therefore, the components of this product are not subject to listing on the TSCA inventory.

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

This is a pesticide product registered with 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:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear protective eyewear. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE):

All Mixers, Loaders, Applicators, and other handlers must wear:

- Protective eyewear
- Long-sleeved shirt and long pants
- Chemical-resistant gloves (e.g., barrier laminate, butyl rubber >14 mils, nitrile rubber >14 mils, neoprene rubber >14 mils, natural rubber >14 mils, polyethylene, polyvinyl chloride (PVC) >14 mils or Viton >14 mils)
- Shoes and socks

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.

Engineering Controls:

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:

Do not apply directly to water, 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 water or rinsate

The pesticide label also includes other important information, including directions for use.

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



Stalwart[®] 2W

Date of preparation: December 10, 2021

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

Hazard Statement(s)

- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H318: Causes serious eye damage.
- H400: Very toxic to aquatic life.
- H401: Toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.
- H412: Harmful 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.