

## MATERIAL SAFETY DATA SHEET

Sipcam Agro USA, Inc.  
2520 Meridian Pkwy., Suite 525  
Durham, NC 27713

In Case of Emergency, Call  
Sipcam Agro USA: 919-226-1195  
CHEMTREC: 800-424-9300

**I. PRODUCT IDENTIFICATION**

Product Name: Stalwart Herbicide  
Active ingredient: Metolachlor (86.4%)  
Active Ingredient IUPAC name: 2-chloro-6'-ethyl-N-(2-methoxy-1-methylethyl)-acet-*o*-toluidide

**II. HAZARDOUS INGREDIENTS**

The substances listed below are those identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<u>Component</u>	<u>CAS No.</u>
Metolachlor	51218-45-2

Exposure Limits:

ACGIH-TLV: Not Established

OSHA-PEL: Not Established

**III. TRANSPORTATION & REGULATORY INFORMATION**

This product is regulated for transportation purposes as follows:

IATA (Air)	NO
IMO (Water)	NO
DOT (Land)	NO

SARA TITLE III INFORMATION

§312 Hazards Classification: Acute and Chronic Health (See Section V for Health Hazard Information)

§313 Inventory Ingredients: None

California Proposition 65: Not applicable

CERCLA reportable quantity: None

RCRA classification:

TSCA status: Exempt

**IV. PHYSICAL & CHEMICAL PROPERTIES**

Boiling Point:	*100° C @ 0.001 mm Hg
Melting Point:	N/A (liquid)
Freezing Point:	N/A
Specific gravity	1.1 @ 20° C
Vapor Pressure:	*3 x 10 <sup>-5</sup> Torr @ 25°C
Solubility in H <sub>2</sub> O:	*488 ppm @ 25°C
% Volatiles by Volume:	N/A
Appearance:	Light brown or amber liquid

\* Denotes information pertaining to technical active ingredient

## V. FIRE AND EXPLOSION DATA

Flash Point:	N/A
Autoignition Temperature:	N/A
Flammable Limits in Air, % by Volume:	Lower: N/A Upper: N/A
Extinguishing Media:	N/A
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and protective clothing.
Unusual Fire and Explosion Hazards:	N/A

## VI. HEALTH HAZARD INFORMATION

Oral LD50 (rat):	Males: 2,926 mg/kg; Females: 2,133 mg/kg (U.S. EPA Category III)
Dermal LD50 (rabbit):	> 5,050 mg/kg (U.S. EPA Category IV)
Inhalation LC50 (4-hour; rat):	> 2.18 mg/L of air (U.S. EPA Category IV)
Primary Eye Irritation (rabbit):	Slightly irritating (U.S. EPA Category III)
Primary Dermal Irritation (rabbit):	Very slightly irritating (U.S. EPA Category IV)

### Emergency and First Aid Procedures

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the contact person the complete product name and the type and amount of exposure by the victim.

Eyes: **IMMEDIATELY** flush eyes with plenty of water, holding eyelids apart to ensure flushing of the entire eye surface and lids. Do not apply any medication except on the advice of a physician.

Skin: Wash with plenty of soap and water. Remove contaminated clothes and footwear. Wash clothing and decontaminate footwear before reuse. Do not apply any medication except on the advice of a physician.

Inhalation: Remove person from contaminated area to fresh air or employ proper respiratory protection until adequate ventilation or other control measure is restored. Apply artificial respiration if necessary.

Ingestion: If victim is fully conscious, immediately give a large quantity of water to drink, then induce vomiting by tickling back of throat with finger. **Never** give anything by mouth to an unconscious person.

Notes to Physician: There is no specific antidote if this product is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. This product has a high affinity to activated charcoal. Fifty (50) grams activated charcoal in 400 ml water can be given to absorb the remaining material in the stomach. Treat the patient symptomatically.

### Possible Effects of Chronic Overexposure:

A 21-day dermal dosing toxicity study in rabbit demonstrated systemic no-effect levels (NOEL) of 100 mg/kg body weight per day for both sexes. Effects at higher doses included increased bilirubin, increased liver weights in males and increased kidney weights in females. No known chronic effects are known in humans. Post-application worker exposure risk due to residues from preemergent applications to agricultural crops is likely to be minimal.

## VII. REACTIVITY DATA

<u>Stability:</u>	Under normal use conditions, this product is stable.
<u>Incompatibility:</u>	Not known.
<u>Hazardous Decomposition Products:</u>	None known.
<u>Hazardous Polymerization:</u>	Material not known to polymerize.

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## VIII. SPILL OR LEAK PROCEDURES

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### Steps To Be Taken If Material Is Released Or Spilled:

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering and a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges, or a self-contained breathing apparatus. Cover spill area with an absorbent material such as pet litter. Sweep up and place in an approved container for pesticide disposal. Wash the spill area with water containing a strong detergent, absorb wash water with pet litter or other absorbent material, sweep up and place in disposal container. Seal the container before shipping for disposal.

### Waste Disposal Method:

Waste portions of this product and contaminated absorbent materials may be disposed of by incineration provided the following conditions are observed:

Incinerate in a suitable oven fed by a mixture of air and methane, at 1100-1200° C temperature;

The HCl which may form in the incinerator exhaust gas must be conveyed into an aqueous absorption system containing 18-20% of Ca(OH)<sub>2</sub>.

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## IX. INDUSTRIAL HYGIENE CONTROL MEASURES

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### Ventilation Requirements

Good industrial hygiene practice dictates that indoor work areas be isolated and provided with adequate local exhaust ventilation. Work upwind in out-of-doors batch operations.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

EYE: Safety glasses, goggles, or face shields.

GLOVES: Chemical-resistant gloves.

### OTHER CLOTHING AND EQUIPMENT

Protective clothing consisting of long sleeve shirt, long pants, socks and shoes should be worn when handling this product. Persons exposed routinely to this material should shower prior to leaving work each day. Safety shower and eye-wash stations should be provided in all areas in which this product is stored and/or handled. Clothing should be changed at least daily and washed thoroughly before re-using.

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