



# SAFETY DATA SHEET

## Stalwart 3W SDS

Issue Date 09-Jan-2017

### 1. IDENTIFICATION

**Product identifier**

Product Name Stalwart 3W

**Other means of identification**

Product Code Stalwart 3W  
Synonyms None  
Registration Number(s) 60063-64

**Recommended use of the chemical and restrictions on use**

Recommended Use Herbicide  
Uses advised against No Information Available

**Details of the supplier of the safety data sheet**

Manufacturer Address  
Sipcam Agro USA, Inc.  
2525 Meridian Parkway, Suite 350  
Durham, NC 27713  
Telephone: 919-226-1195

**Emergency telephone number**

Emergency Telephone CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
(Collect Calls Accepted)

### 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Serious eye damage/eye irritation                  | Category 2B |
| Skin sensitization                                 | Category 1  |
| Specific target organ toxicity (repeated exposure) | Category 2  |

**Label elements**

**Warning**

**Emergency Overview**

**Hazard statements**

Causes eye irritation  
May cause an allergic skin reaction  
May cause damage to organs through prolonged or repeated exposure

**Appearance** Opaque**Physical state** liquid**Odor** Mildly**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 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: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful if swallowed. Causes mild skin irritation. Very toxic to aquatic life with long lasting effects.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

**Synonyms** None.

| Chemical Name                     | CAS No      | Weight-% |
|-----------------------------------|-------------|----------|
| Other ingredients                 | Proprietary | 59.48    |
| Metolachlor                       | 51218-45-2  | 19.00    |
| Atrazine                          | 1912-24-9   | 18.61    |
| Mesotrione                        | 104206-82-8 | 2.44     |
| Related active triazine compounds | Proprietary | 0.48     |

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.                                  |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Call a poison control center or doctor for treatment advice. |
| <b>Inhalation</b>                         | Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately. Call a poison control center or doctor for treatment advice.                                     |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.  |

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

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Redness. Repeated contact may cause allergic reactions in very susceptible persons. May cause redness and tearing of the eyes. |
|-----------------|--|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or regular foam. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal. Water spray, fog or regular foam.

**Unsuitable extinguishing media** None.

### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Oxides of sulfur.

### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**For emergency responders** Use personal protection recommended in Section 8. Ventilate the area.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep in properly labeled containers.

**Packaging materials** Do not reuse container.

**Incompatible materials** Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Chemical Name         | ACGIH TLV                                   | OSHA PEL | NIOSH IDLH               |
|-----------------------|---|----------|--------------------------|
| Atrazine<br>1912-24-9 | TWA: 2 mg/m <sup>3</sup> inhalable fraction | -        | TWA: 5 mg/m <sup>3</sup> |

NIOSH IDLH Immediately Dangerous to Life or Health

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas. And. Showers. Eyewash stations. Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear suitable protective clothing. Wear protective butyl rubber gloves. Protective shoes or boots.

**Respiratory protection**

Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                                |                          |                                |                          |
|--------------------------------|--------------------------|--------------------------------|--------------------------|
| Physical state                 | liquid                   | Odor                           | Mildly                   |
| Appearance                     | Opaque                   | Odor threshold                 | No information available |
| Color                          | Off-white                |                                |                          |
| <b><u>Property</u></b>         | <b><u>Values</u></b>     | <b><u>Remarks • Method</u></b> |                          |
| pH                             | 3.32                     | solution (1 %)                 |                          |
| Melting point / freezing point | No information available |                                |                          |
| Boiling point / boiling range  | No information available |                                |                          |
| Flash point                    | > 100 °C / > 212 °F      | Seta Closed Cup                |                          |
| Evaporation rate               | No information available |                                |                          |
| Flammability (solid, gas)      | No information available |                                |                          |
| Flammability Limit in Air      |                          |                                |                          |
| Upper flammability limit:      | No information available |                                |                          |
| Lower flammability limit:      | No information available |                                |                          |
| Vapor pressure                 | ~17 mmHg                 | @ 20 °C                        |                          |
| Vapor density                  | No information available |                                |                          |
| Relative density               | 1.07 g/cm3               |                                |                          |
| Water solubility               | dispersible              |                                |                          |
| Solubility in other solvents   | No information available |                                |                          |
| Partition coefficient          | No information available |                                |                          |
| Autoignition temperature       | No information available |                                |                          |
| Decomposition temperature      | No information available |                                |                          |
| Kinematic viscosity            | No information available |                                |                          |
| Dynamic viscosity              | No information available |                                |                          |
| Explosive properties           | Not an explosive         |                                |                          |
| Oxidizing properties           | Not applicable           |                                |                          |

### Other Information

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Density          | No information available |
| Bulk density     | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Conditions to avoid**

Elevated Temperature. Storage near to reactive materials.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NOx). Carbon oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

Acute Oral LD50 (rat): >2000 mg/kg  
 Acute Dermal LD50 (rabbit): > 2000 mg/kg  
 Eye Irritation (rabbit): Moderately irritating.  
 Skin Irritation (rabbit): Mildly irritating.  
 Inhalation LC50 (rat): >5.12 mg/L (4 HR)  
 Skin Sensitization (guinea pig): Sensitizer

**Inhalation**

Based on available data, the classification criteria are not met.

**Eye contact**

Moderately irritating to the eyes.

**Skin contact**

May cause sensitization by skin contact. Substance may cause slight skin irritation.

**Ingestion**

May be harmful if swallowed.

| Chemical Name                     | Oral LD50            | Dermal LD50  | Inhalation LC50                      |
|-----------------------------------|----------------------|--|--------------------------------------|
| Other ingredients                 | > 90 mL/kg ( Rat )   | -  | -                                    |
| Metolachlor<br>51218-45-2         | >2000 mg/kg (rat)    | >2000 mg/kg (rabbit)   | >3.20 mg/L (rat)                     |
| Atrazine<br>1912-24-9             | = 672 mg/kg ( Rat )  | > 5000 mg/kg ( Rat ) = 7500 mg/kg<br>( Rabbit ) > 2000 mg/kg ( Rat ) | = 5200 mg/m <sup>3</sup> ( Rat ) 4 h |
| Related active triazine compounds | = 1390 mg/kg ( Rat ) | > 1 g/kg ( Rat )   | = 1563 g/m <sup>3</sup> ( Rat ) 1 h  |

**Information on toxicological effects****Symptoms**

Redness. May cause an allergic skin reaction. May cause redness and tearing of the eyes.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization**

May cause sensitization in susceptible persons.

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Based on available data, the classification criteria are not met. The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name         | ACGIH | IARC    | NTP | OSHA |
|-----------------------|-------|---------|-----|------|
| Atrazine<br>1912-24-9 | A3    | Group 3 | -   | -    |

*ACGIH (American Conference of Governmental Industrial Hygienists)**A3 - Animal Carcinogen**IARC (International Agency for Research on Cancer)**Not classifiable as a human carcinogen***Reproductive toxicity**

Based on available data, the classification criteria are not met.

**STOT - single exposure**

Based on available data, the classification criteria are not met.

**STOT - repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

**Chronic toxicity**

May cause adverse liver effects.

**Target Organ Effects**

Central nervous system, Eyes, liver, Respiratory system, Skin.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 3,611.00 mg/kg |
| ATEmix (dermal)               | 9,266.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 27.90 mg/l     |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life with long lasting effects

This product is toxic to aquatic invertebrates. 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 cleaning of equipment or disposing of equipment washwaters or rinsate.

59.47 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name             | Algae/aquatic plants   | Fish  | Crustacea   |
|---------------------------|--|---|---|
| Metolachlor<br>51218-45-2 | Green algae 96-hr EC50 = 0.4 mg/L  | Bluegill 96-hr EC50 = 10 mg/L   | 25.1: 48 h Daphnia magna mg/L<br>LC50 4.25: 48 h Daphnia magna<br>mg/L EC50 13 - 18.4: 48 h Daphnia<br>magna mg/L EC50 Static |
| Atrazine<br>1912-24-9     | 0.03: 72 h Desmodesmus<br>subspicatus mg/L EC50 0.014 -<br>0.027: 96 h Desmodesmus<br>subspicatus mg/L EC50 semi-static<br>0.13: 96 h Pseudokirchneriella<br>subcapitata mg/L EC50 0.0929: 72 h<br>Pseudokirchneriella subcapitata<br>mg/L EC50 semi-static 0.0096 -<br>0.07: 72 h Pseudokirchneriella<br>subcapitata mg/L EC50 static 0.072:<br>72 h Desmodesmus subspicatus<br>mg/L EC50 static 0.2: 72 h<br>Pseudokirchneriella subcapitata<br>mg/L EC50 0.004: 96 h<br>Pseudokirchneriella subcapitata<br>mg/L EC50 static | 4.5 - 11: 96 h Oncorhynchus mykiss<br>mg/L LC50 3 - 6.75: 96 h<br>Oncorhynchus mykiss mg/L LC50<br>semi-static 5.4 - 8.4: 96 h Lepomis<br>macrochirus mg/L LC50 static<br>23.999: 96 h Lepomis macrochirus<br>mg/L LC50 semi-static 4.1: 96 h<br>Pimephales promelas mg/L LC50<br>static 4.3: 96 h Poecilia reticulata<br>mg/L LC50 static 3 - 6.75: 96 h<br>Oncorhynchus mykiss mg/L LC50<br>static 8: 96 h Lepomis macrochirus<br>mg/L LC50 flow-through 16: 96 h<br>Lepomis macrochirus mg/L LC50 19:<br>96 h Cyprinus carpio mg/L LC50<br>static 15.7 - 20.2: 96 h Cyprinus<br>carpio mg/L LC50 semi-static | 5.2 - 8.1: 48 h Daphnia magna mg/L<br>EC50 Static   |

### Persistence and degradability

Not readily biodegradable.

### Bioaccumulation

Not likely to bioaccumulate.

| Chemical Name             | Partition coefficient |
|---------------------------|-----------------------|
| Metolachlor<br>51218-45-2 | 2.9                   |
| Atrazine<br>1912-24-9     | 2.59                  |

### Other adverse effects

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Disposal of wastes

Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper

disposal of waste product.

**Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Consult product label for additional information. Do not reuse container.

**14. TRANSPORT INFORMATION****DOT**

Not regulated

**TDG**

Not regulated

**IATA**

|                             |  |
|-----------------------------|--|
| <b>UN/ID no</b>             | UN3082   |
| <b>Proper shipping name</b> | Environmentally hazardous substance, liquid, n.o.s.  |
| <b>Hazard Class</b>         | 9  |
| <b>Packing Group</b>        | III  |
| <b>ERG Code</b>             | 9L   |
| <b>Special Provisions</b>   | A97, A158, A197  |
| <b>Description</b>          | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Mesotrione, Atrazine), 9, III |

**IMDG**

|                             |  |
|-----------------------------|--|
| <b>UN/ID no</b>             | UN3082   |
| <b>Proper shipping name</b> | Environmentally hazardous substance, liquid, n.o.s.  |
| <b>Hazard Class</b>         | 9  |
| <b>Packing Group</b>        | III  |
| <b>EmS-No</b>               | F-A, S-F   |
| <b>Special Provisions</b>   | 274, 335   |
| <b>Description</b>          | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Mesotrione, Atrazine), 9, III; Marine Pollutant |

**15. REGULATORY INFORMATION****International Inventories**

|                      |          |
|----------------------|----------|
| <b>TSCA</b>          | Complies |
| <b>DSL/NDSL</b>      | Complies |
| <b>EINECS/ELINCS</b> | Complies |
| <b>IECSC</b>         | Complies |
| <b>KECL</b>          | Complies |
| <b>PICCS</b>         | Complies |
| <b>AICS</b>          | Complies |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name        | SARA 313 - Threshold Values % |
|----------------------|-------------------------------|
| Atrazine - 1912-24-9 | 1.0                           |



**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name             | New Jersey | Massachusetts | Pennsylvania |
|---------------------------|------------|---------------|--------------|
| Metolachlor<br>51218-45-2 | X          | -             | -            |
| Atrazine<br>1912-24-9     | X          | X             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number 83100-47

**EPA Statement**

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 for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**Difference between SDS and EPA Pesticide label**

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

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|                                   |                           |                |                    |                                    |
|-----------------------------------|---------------------------|----------------|--------------------|------------------------------------|
| <b>NEPA</b>                       | Health hazards 2          | Flammability 0 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b>                       | Health hazards 2*         | Flammability 0 | Physical hazards 0 | Personal protection X              |
| <i>Chronic Hazard Star Legend</i> | * = Chronic Health Hazard |                |                    |                                    |

Issue Date 09-Jan-2017

Revision Date 09-Jan-2017

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.