

Sim-Trol® 90DF Flowable Herbicide

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Mixture
Trade Names	Sim-Trol® 90DF Flowable Herbicide
CAS No.	Mixture
EPA Identification Number	EPA Reg. No. 35915-12-60063

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)
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	STOT SE 1; STOT RE 1; Repr. 1B
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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)

DANGER

Hazard Statement(s)

Causes damage to organs: Neuroendocrine system.
Causes damage to organs through prolonged or repeated exposure: Neuroendocrine system and Blood.
May damage fertility or the unborn child.

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Precautionary Statement(s)

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dust.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Wash hands and exposed skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
IF exposed or concerned: Get medical advice/attention. Treat symptomatically.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 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

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)
Simazine	~ 90	122-34-9	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT-SE 1; H370 STOT-RE 1; H372 Repr. 1B; H360 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

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

Causes damage to organs: Neuroendocrine system.



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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

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

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, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust. 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

Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. 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)	
Simazine	122-34-9	-----	0.5 mg/m ³	-----	-----	Inhalable Fraction

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Exposure controls

Appropriate engineering controls

Do **NOT** aerosolize or atomize to produce inhalable-size particles. Use low-pressure course 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	Solid Granules
Colour.	Light Hazel-brown
Odour	Characteristic
Odour Threshold (ppm)	Not available.
pH (Value)	9.89
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not available.
Flash Point (°C)	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Explosive Limit Ranges	Not available.
Vapour pressure (Pascal)	Not available.
Vapour Density (Air=1)	Not available.
Density (g/ml)	0.597
Solubility (Water)	Not available.
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)	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Other information	Not available.

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SECTION 10: STABILITY AND REACTIVITY

Reactivity	No hazardous reactions known if used for its intended purpose.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	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.

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 >4000 mg/kg-bw (rat) Inhalation: LC50 >2.22 mg/L (rat)
Skin corrosion/irritation	Unlikely to cause skin irritation.
Serious eye damage/irritation	Unlikely to cause eye irritation.
Respiratory or skin sensitization	It is not a skin sensitiser in animal tests.
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:

Simazine (CAS# 122-34-9):

Acute toxicity	Oral: LD50 >2000 mg/kg-bw (rat); Causes damage to organs: neuroendocrine system Dermal: LD50 >2000 mg/kg-bw (rat) Inhalation: LC50 >1.71 mg/L (rat)
Irritation/Corrosivity	Causes serious eye irritation. Causes skin irritation.
Sensitization	Not to be expected.
Repeated dose toxicity	Causes damage to organs through prolonged or repeated exposure: neuroendocrine system and Blood. NOEAL = 1.8 mg/kg-bw/day (rat)
Carcinogenicity	Not to be expected.

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

Mutagenicity	Not to be expected.
Reproductive toxicity	May damage fertility or the unborn child. NOAEL = 1.8 mg/kg-bw/day (rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Simazine (CAS# 122-34-9):

Short term
 LC50 (96 hour): 0.8 mg/l (Danio rerio)
 LC50 (96 hour): 1 – 10 mg/l (Pimephales promelas)
 EC50 (48 hour): 0.056 – 2.2 mg/L (Daphnia magna)
 EC50 (72 hour): 0.1 - 1 mg/l (*Pseudokirchneriella subcapitata*)

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

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.S. DOT) *	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	Not classified as dangerous for transport. *	UN 3077	UN 3077
Proper Shipping Name		Environmentally hazardous substance, solid, n.o.s. (Simazine)	
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 UN3077, Environmentally hazardous substance, solid, n.o.s. (Simazine), 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:



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CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation.

Personal Protective Equipment (PPE):

Mixers, loaders and handlers supporting groundboom applications must wear:

- Coveralls over long sleeve shirt and long pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Polyvinyl Chloride (PVC) ≥14 mils, Viton ≥14 mils.
- Chemical-resistant apron
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any N*, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N*, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks
- Chemical-resistant gloves made of Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Polyvinyl Chloride (PVC) ≥14 mils, Viton ≥14 mils.

For grapefruit and orange applications:

Mixer, loader, and applicators for backpack application to grapefruit and oranges are required to wear coveralls over long-sleeved shirts and long pants.

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product concentrate. DO NOT reuse them.

Engineering Controls:

When handlers use closed systems, enclosed cabs 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:

Simazine can travel (seep or leach) through soil and enter ground water which may be used as drinking water. Simazine has been found in ground water as a result of its use as an herbicide. Users are advised not to apply Simazine to sand and loamy soils where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

This pesticide 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. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

Products must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. Product must not be applied within 66 feet of points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 foot buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop. Product must not be mixed or loaded, or used within 50 feet of all wells, including abandoned wells, drainage wells and sink holes. Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water and rain water that may fall on the pad. Surface water shall not be allowed to either flow over, or from, the pad which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain, at a minimum, 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide to the mixing/loading sites.

Additional state imposed requirements regarding well-head setbacks and operational area containment must be observed.

One of the following restrictions must be used in applying simazine to tile-outletted terraced fields containing standpipes:

- DO NOT apply within 66 feet of standpipes
- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
- Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the



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field during and after crop harvest.

Non-Target Organism Advisory Statement

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.
Simazine	122-34-9	~ 43

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
Simazine	122-34-9	~ 43	Developmental Reproductive Toxicity, female

SECTION 16: OTHER INFORMATION

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

Date of preparation: December 9, 2021

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

Hazard Statement(s)

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H360: May damage fertility or the unborn child.
- H370: Causes damage to organs.
- H372: Causes damage to organs through prolonged or repeated exposure.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

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