SAFETY DATA SHEET Battery® One Herbicide

Revision date: 2020-09-08



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Battery® One Herbicide

EPA Number 279-3246-1381

Other means of identification

Synonyms SULFENTRAZONE:

2',4'-dichloro-5'-(4-difluoromethyl-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)

methanesulfonanilide (IUPAC name);

N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-

1,2,4-triazol-1-yl]phenyl] methanesulfonamide (CAS name);

CLORANSULÁM-METHYL: N-(2-carbomethoxy-6-chlorophenyl)-5-ethoxy-7-fluoro(1,2,4)triazolo-[1,5-c]pyrimidine-2-sulfonamide

Active Ingredient(s) Sulfentrazone, Cloransulam-methyl

Chemical Family Triazolinones, Triazolopyrimidine sulfonanilide

Recommended use of the chemical and restrictions on use

Recommended Use: Herbicide

Restrictions on Use: Use as recommended by the label.

Supplier Address

Winfield Solutions, LLC

PO Box 64589 St. Paul, MN 55164

Non-Emergency Business Inquiries: 1-855-434-6343

Mon-Fri 8am - 5pm CST

Emergency telephone number

Medical Emergencies: 1 877 / 424-7452 (24 HRS)

For leak, fire, exposure, spill or accident emergencies, call: 1800 / 424-9300 (CHEMTREC - U.S.A.) (24 HRS)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Specific target organ toxicity (repeated exposure)

Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

H373 - May cause damage to organs through prolonged or repeated exposure

Physical Hazards

May form combustible dust concentrations in air



Precautionary Statements - Prevention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

P314 - Get medical advice/ attention if you feel unwell

Precautionary Statements - Disposal

P501: Dispose of contents/container as hazardous waste in accordance with local regulations.

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family

Triazolinones, Triazolopyrimidine sulfonanilide.

Chemical name	CAS-No	Weight %
Sulfentrazone	122836-35-5	61.4
Chloroansulam-methyl	147150-35-4	7.9
Toluene	108-88-3	<5

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact

lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control

center or doctor for further treatment advice.

Skin ContactTake off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial

respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for

further treatment advice.

Ingestion Call a poison control center or doctor immediately for treatment advice Have person sip a

glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison

control center or doctor. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

mptoms and Central nervous system effects.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Small Fire Dry chemical. Carbon dioxide (CO₂).

Large Fire Water spray. Foam.

Unsuitable extinguishing media Avoid heavy hose streams.

Specific Hazards Arising from the

Chemical

Finely dispersed particles can form explosive mixtures in air.

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge No information available. No information available.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face

protection. For personal protection see section 8.

Other For further clean-up instructions, call Winfield Solutions, LLC Emergency Hotline

number listed in Section 1 "Product and Company Identification" above.

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes,

streams, ponds, and sewer drains.

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

Methods for cleaning upSweep up and shovel into suitable containers for disposal. Clean and neutralize spill area,

tools and equipment by washing with water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal.

Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling Do not contaminate other pesticides, fertilizers, water, food, or feed by storage disposal.

Storage Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces

and sources of ignition. Keep out of reach of children and animals. Store in original

container.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Toluene	TWA: 20 ppm	TWA: 200 ppm	IDLH: 500 ppm	Mexico: TWA 20 ppm
(108-88-3)		Ceiling: 300 ppm	TWA: 100 ppm	
			TWA: 375 mg/m ³	
			STEL: 150 ppm	
			STEL: 560 mg/m ³	
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Toluene	TWA: 20 ppm	TWA: 50 ppm	TWA: 20 ppm	TWA: 50 ppm
(108-88-3)		TWA: 188 mg/m ³		TWA: 188 mg/m ³
		Skin		Skin

Appropriate engineering controls

Engineering measures Apply technical measures to comply with the occupational exposure limits. When working in

confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for

breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the

outside of gloves with soap and water before reuse. Check regularly for leaks.

Respiratory Protection For dust, splash, mist or spray exposures, wear a filtering mask.

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash

skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing

separately from regular household laundry.

General information If the product is used in mixtures, it is recommended that you contact the appropriate

protective equipment suppliers. These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Tan Granules

Physical State Solid
Color Tan
Odor Musty

Odor threshold No information available

pH 6-8

Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point Not applicable

Evaporation RateFlammability (solid, gas)
No information available
No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available Relative density No information available Specific gravity No information available Water solubility Dispersible in water Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Viscosity, kinematic No information available Viscosity, dynamic No information available

Explosive properties Fine dust dispersed in air may ignite

Oxidizing properties No data available

Molecular weight No information available

Bulk density 35 - 42 lb/cu ft

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions

Chemical Stability Stable.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat

Incompatible materials None known.

Hazardous Decomposition Products Carbon oxides (COx), Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Hydrogen

fluoride.

11. TOXICOLOGICAL INFORMATION

Product Information

 LD50 Oral
 2,504 mg/kg (rat)

 LD50 Dermal
 > 5,000 mg/kg (rabbit)

 LC50 Inhalation (dust)
 > 4.9 mg/L 4 hr (rat)

Serious eye damage/eye irritation

Skin corrosion/irritation

Minimally irritating (rabbit). Slightly irritating (rabbit).

Sensitization

Non-sensitizing

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Chloroansulam-methyl (147150-35-4)	> 5000 mg/kg(Rat)	> 2000 mg/kg(Rabbit)	
Toluene (108-88-3)	= 2600 mg/kg(Rat)	= 12000 mg/kg(Rabbit)	= 12.5 mg/L (Rat)4 h

Information on toxicological effects

Symptoms Signs of toxicity in laboratory animals given sulfentrazone included clonic convulsions,

ataxia, hypersensitivity to touch, chromorhinorrhea, abdominogenital staining, decreased

locomotion, lacrimation, nasal discharge, and squinting eyes.

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

Chronic toxicity Chronic exposure to silica dust may increase the risk of developing pneumoconiosis or

silicosis, chronic diseases affecting the lungs, characterized by labored breathing, cough, reduction of work capacity, reduction of lung capacity, heart enlargement and failure

Mutagenicity Sulfentrazone: Not genotoxic in laboratory studies.

CarcinogenicitySulfentrazone, Cloransulam-methyl: No evidence of carcinogenicity from animal studies. **Neurological effects**Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high

dose levels.

Reproductive toxicity Sulfentrazone, Cloransulam-methyl: No toxicity to reproduction in animal studies.

Developmental toxicitySulfentrazone: Fetal weight decreased; delayed skeletal ossification observed at maternally

non-toxic doses are reversible effects and a dose-response is established; malformations observed in fetuses at maternally toxic dosesand consistent with the mode of action for protoporphyrongen oxidase inhibitors. Developmental toxicity testing and results were generated for sulfentrazone with toluene present as an impurity. Cloransulam-methyl: Not

teratogenic in animal studies.

STOT - single exposure Not classified.

STOT - repeated exposureMay cause damage to organs through prolonged or repeated exposure.

 Target organ effects
 Sulfentrazone: Hematopoietic system.

Neurological effects Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high

dose levels.

Aspiration hazard No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene		Group 3		
108-88-3				

Legend:

IARC (International Agency for Research on Cancer)

Group 3 - Not classifiable as to its carcinogenicity to humans

12. ECOLOGICAL INFORMATION

Ecotoxicity

ulfentrazone (122836-35-5)				
Active Ingredient(s)	Duration	Species	Value	Units
Sulfentrazone	72 h EC50	Algae	32.8	mg/L
	48 h EC50	Crustacea	60.4	mg/L
	96 h LC50	Fish	94	mg/L
	21 d NOEC	Fish	5.9	mg/L
	21 d NOEC	Crustacea	0.51	mg/L

Chloroansulam-methyl (147150-35-4)				
Active Ingredient(s)	Duration	Species	Value	Units
Cloransulam-methyl	LC50	Fish	>86	mg/L
	LC50	Daphnia magna	98	mg/L
	EC50	Algae	3.5-12	μg/L
	LD50 Oral	Bobwhite quail	>2200	mg/kg

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Toluene	72 h EC50: = 12.5 mg/L	96 h LC50: 11.0 - 15.0 mg/L	48 h EC50: 5.46 - 9.83 mg/L
108-88-3	(Pseudokirchneriella subcapitata)	(Lepomis macrochirus) static 96 h	(Daphnia magna) Static 48 h EC50:
	static 96 h EC50: > 433 mg/L	` LC50: 14.1 - 17.16 mg/L	` = 11.5 mg/L (Ďaphnia magna)
	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss) static 96 h	, , , , , ,
		LC50: 15.22 - 19.05 mg/L	
		(Pimephales promelas) flow-through	
		96 h LC50: 5.89 - 7.81 mg/L	
		(Oncorhynchus mykiss)	
		flow-through 96 h LC50: 50.87 -	
		70.34 mg/L (Poecilia reticulata)	
		static 96 h LC50: = 12.6 mg/L	
		(Pimephales promelas) static 96 h	
		LC50: = 28.2 mg/L (Poecilia	
		reticulata) semi-static 96 h LC50: =	
		5.8 mg/L (Oncorhynchus mykiss)	
		semi-static 96 h LC50: = 54 mg/L	
		(Oryzias latipes) static	
Sodium Borate	96 h EC50: 2.6 - 21.8 mg/L	96 h LC50: = 340 mg/L (Limanda	48 h LC50: 1085 - 1402 mg/L
1330-43-4	(Pseudokirchneriella subcapitata)	limanda)	(Daphnia magna)
	static 96 h EC50: = 158 mg/L		
	(Desmodesmus subspicatus)		
Sodium chloride		96 h LC50: 4747 - 7824 mg/L	48 h EC50: 340.7 - 469.2 mg/L
7647-14-5		(Oncorhynchus mykiss)	(Daphnia magna) Static 48 h EC50:
		flow-through 96 h LC50: 5560 -	= 1000 mg/L (Daphnia magna)
		6080 mg/L (Lepomis macrochirus)	
		flow-through 96 h LC50: 6020 -	
		7070 mg/L (Pimephales promelas)	
		static 96 h LC50: 6420 - 6700 mg/L (Pimephales promelas) static 96 h	
		LC50: = 12946 mg/L (Lepomis	
		macrochirus) static 96 h LC50: =	
		7050 mg/L (Pimephales promelas)	
		semi-static	
Sodium lignosulfonate		48 h LC50: = 7300 mg/L	
8061-51-6		(Oncorhynchus mykiss)	

Persistence and degradability Sulfentrazone: Persistent in soil. Does not readily hydrolyze. Not readily biodegradable.

Bioaccumulation Sulfentrazone, Cloransulam-methyl: The substance does not have a potential for

bioconcentration.

Mobility Sulfentrazone: Mobile; Has potential to reach ground water.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these

wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in

Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated containers

and packages Containers must be disposed of in accordance with local, state and federal regulations.

Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT This material is not a hazardous material as defined by U.S. Department of Transportation

at 49 CFR Parts 100 through 185.

TDG Classification below is only applicable when shipped by vessel and is not applicable when

shipped by road or rail only.

UN/ID no UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfnetrazone,

cloransulam-methyl)

Hazard class Packing Group Ш

Marine Pollutant Sulfentrazone, Cloransulam-methyl.

UN3077, Environmentally hazardous substance, solid, n.o.s. (Sulfentrazone, Description

Cloransulam-methyl), 9, PGIII, Marine Pollutant

ICAO/IATA

UN/ID no

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfentrazone,

cloransulam-methyl)

Hazard class Packing Group

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Sulfentrazone,

Cloransulam-methyl), 9, PGIII, Marine Pollutant

IMDG/IMO

UN/ID no UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfentrazone,

cloransulam-methyl)

Hazard class Packing Group Ш

EmS No. F-A, S-F

Marine Pollutant Sulfentrazone, Cloransulam-methyl

UN3077, Environmentally hazardous substance, solid, n.o.s. (Sulfentrazone, Description

Cloransulam-methyl), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

U.S. 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	CAS-No	Weight %	SARA 313 - Threshold Values %
Toluene - 108-88-3	108-88-3	<5	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	Х	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Toluene 108-88-3	1000 lb 454 kg	

FIFRA Information

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:

CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin.

This pesticide is toxic to marine/estuarine invertebrates.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Toluene - 108-88-3	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Toluene	X	X	X
108-88-3			

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Toluene 108-88-3	Х	X	X	Х	X	X	X	X

CANADA

This Safety Data Sheet is for a pesticide product registered by the Pest Management Regulatory Agency (PMRA), and is therefore also subject to certain requirements under Canadian pesticide laws, including the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required by the Hazardous Product Regulations (HPR) and WHMIS 2015 for safety data sheets, and for workplace labels of non-pesticide chemicals. The following information is determined by PMRA.

The approved pest control product label (the label), under the Pest Control Products Act, needs to be followed at all times and in cases where there are any discrepancies between the approved label and an SDS for that product it is the label information that prevails.

16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 1*	Flammability 0	Physical hazard 0	Personal Protection X

^{*}Indicates a chronic health hazard.

NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date: 2020-09-08

Replaces: New

Reason for revision: New

Disclaimer

Winfield Solutions, LLC believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of Winfield Solutions, LLC, Winfield Solutions, LLC expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

Winfield Solutions, LLC

© 2020 Winfield Solutions, LLC. All Rights Reserved.

End of Safety Data Sheet