

# SAFETY DATA SHEET

Solitare WSL Herbicide

SDS # : 7557-A  
Revision date: 2015-04-13  
Format: NA  
Version 1.01



## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Solitare WSL Herbicide

### Other means of identification

**Product Code(s)** 7557-A

**Synonyms** SULFENTRAZONE (FMC 97285):  
2',4'-dichloro-5'-(4-difluoromethyl-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)  
methanesulfonanilide; N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-  
1,2,4-triazol-1-yl]phenyl] methanesulfonamide  
  
QUINCLORAC: 3,7-dichloroquinoline-8-carboxylic acid; 3,7-dichloro-8-quinolinecarboxylic  
acid

**Active Ingredient(s)** Sulfentrazone; Quinclorac

**Chemical Family** Triazolinones; Quinoline derivative

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

**Recommended Use:** Herbicide

**Restrictions on Use:** Use as recommended by the label

### Manufacturer Address

FMC Corporation  
1735 Market Street  
Philadelphia, PA 19103  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

### Emergency telephone number

For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)  
Medical Emergencies:  
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)  
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

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

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (repeated exposure)	Category 2

### GHS Label elements, including precautionary statements

#### EMERGENCY OVERVIEW

##### Warning

##### Hazard Statements

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

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



##### Precautionary Statements - Prevention

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

##### Precautionary Statements - Response

P314 - Get medical advice/ attention if you feel unwell

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

##### Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

##### Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

##### Other Information

Harmful to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical Family

Triazolinones; Quinoline derivative.

Chemical name	CAS-No	Weight %
Quinclorac	84087-01-4	5.0
Sulfentrazone	122836-35-5	1.6
Propylene glycol	57-55-6	1-10
Ethanolamine	141-43-5	1-5
Toluene	108-88-3	<1

Synonyms are provided in Section 1.

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
<b>Skin Contact</b>	Take 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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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. Do not give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media</b>	Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Soft stream or water fog only if necessary.
<b>Specific Hazards Arising from the Chemical</b>	None known
<b><u>Explosion data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.
<b>Methods for Containment</b>	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Clean and neutralize spill area, tools and equipment by washing with bleach 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**

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	Keep away from open flames, hot surfaces and sources of ignition. Keep in a dry, cool and well-ventilated place. Keep out of reach of children and animals. Keep/store only in original container.

Incompatible products                      None known

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Ethanolamine 141-43-5	STEL 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m <sup>3</sup>	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m <sup>3</sup> STEL: 6 ppm STEL: 15 mg/m <sup>3</sup>	Mexico: TWA 3 ppm Mexico: TWA 8 mg/m <sup>3</sup> Mexico: STEL 6 ppm Mexico: STEL 15 mg/m <sup>3</sup>
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>	Mexico: S* Mexico: TWA 50 ppm Mexico: TWA 188 mg/m <sup>3</sup>
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Propylene glycol 57-55-6	-	-	TWA: 10 mg/m <sup>3</sup> (aerosol only)  TWA: 50 ppm (aerosol and vapor)  TWA: 155 mg/m <sup>3</sup> (aerosol and vapor)	-
Ethanolamine 141-43-5	TWA: 3 ppm STEL: 6 ppm	TWA: 3 ppm TWA: 7.5 mg/m <sup>3</sup> STEL: 6 ppm STEL: 15 mg/m <sup>3</sup>	TWA: 3 ppm STEL: 6 ppm	TWA: 3 ppm TWA: 7.5 mg/m <sup>3</sup> STEL: 6 ppm STEL: 15 mg/m <sup>3</sup>
Toluene 108-88-3	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup> Skin	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup> 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**                      Tightly fitting safety goggles.

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

**Hand Protection**                              Protective gloves

**Respiratory Protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**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

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Appearance</b>	Amber
<b>Physical State</b>	Liquid
<b>Color</b>	Amber
<b>Odor</b>	Mild chemical odor
<b>Odor threshold</b>	No information available
<b>pH</b>	9.02
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	> 100 °C / > 212 °F Tag Closed Cup
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	8.65 lb/gal
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	12.9 cSt @ 25 °C
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	8.65 lb/gal

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	None under normal use conditions
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous Decomposition Products</b>	No information available.

**11. TOXICOLOGICAL INFORMATION****Product Information**

<b>LD50 Oral</b>	> 2,000 mg/kg
<b>LD50 Dermal</b>	> 2,000 mg/kg
<b>LC50 Inhalation</b>	> 2.13 mg/L 4 hr
<b>Serious eye damage/eye irritation</b>	Moderately irritating to eyes.
<b>Skin corrosion/irritation</b>	Non-irritating.
<b>Sensitization</b>	Non-sensitizing.

**Information on toxicological effects**

**Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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

**Chronic toxicity** Quinclorac: Prolonged exposure caused decreased body weight, increased liver enzyme and focal chronic interstitial nephritis. Sulfentrazone: Prolonged exposure cause decreased hemoglobin content and hematocrit, and increased spleen weight and splenic extramedullary hematopoiesis at high doses in animal studies.

**Mutagenicity** Quinclorac: Sulfentrazone: Not genotoxic in laboratory studies.

**Carcinogenicity** Quinclorac, Sulfentrazone: No evidence of carcinogenicity from animal studies.

**Neurological effects** Quinclorac: No neurotoxicity observed in animal studies. Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high dose levels.

**Reproductive toxicity** Quinclorac: Sulfentrazone: No toxicity to reproduction in animal studies.

**Developmental toxicity** Quinclorac: Not teratogenic in animal studies. Sulfentrazone: 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 doses and 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.

**STOT - single exposure** Not classified.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

**Target organ effects** Liver, kidney, Hematopoietic system.

**Neurological effects** Quinclorac: No neurotoxicity observed in animal studies. 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 108-88-3		Group 3		

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

<b>Quinclorac (84087-01-4)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
Quinclorac	72 h EC50	Algae	6.53	mg/L
	48 h EC50	Daphnia	29.8	mg/L
	96 h LC50	Fish	>100	mg/L
	21 d NOEC	Crustacea	50.4	mg/L

<b>Sulfentrazone (122836-35-5)</b>				
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

**Persistence and degradability** Quinclorac, Sulfentrazone: Persistent. Does not readily hydrolyze.

**Bioaccumulation** Quinclorac, Sulfentrazone: The substance does not have a potential for bioconcentration.

**Mobility** Quinclorac, 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.

**Contaminated Packaging** Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this container.

## 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.

**Description** Not required

### **TDG**

**UN/ID no** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Marine Pollutant** Sulfentrazone.  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Sulfentrazone), 9, III (Marine Pollutant)

### **ICAO/IATA**

**UN/ID no** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Sulfentrazone), 9, III

### **IMDG/IMO**

**UN/ID no** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**EmS No.** F-A, S-F  
**Marine Pollutant** Sulfentrazone  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Sulfentrazone), 9, III (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:

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic health hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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):

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Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	X	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	RQ
Toluene 108-88-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

### 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

*Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.  
This product 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 Female Reproductive

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol 57-55-6	X		X
Ethanolamine 141-43-5	X	X	X

### International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Quinlorac 84087-01-4 ( 5.0 )		X	X		X		X	X
Propylene glycol 57-55-6 ( 1-10 )	X	X	X	X	X	X	X	X
Ethanolamine 141-43-5 ( 1-5 )	X	X	X	X	X	X	X	X
Toluene 108-88-3 ( <1 )	X	X	X	X	X	X	X	X

Mexico - Grade

Moderate risk, Grade 2



WHMIS Hazard Class

D2B - Toxic materials



<b>16. OTHER INFORMATION</b>
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NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 1	Physical hazard 0	Personal Protection X

NFPA/HMIS Ratings Legend \* - Chronic hazard

Revision date: 2015-04-13  
Revision note: Format Change

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Prepared By:

**End of Safety Data Sheet**