

# Material Safety Data Sheet

## STANZA HERBICIDE

MSDS #: 7592-A  
Revision Date: 2014-01-23  
Version 1



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 And Canadian Workplace Hazardous Materials Information System (WHMIS) requirements.

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	STANZA HERBICIDE
<b>Manufacturer</b>	<b>Emergency telephone number</b>
FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	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

<b>Appearance</b>	Tan to brown granules
<b>Physical state</b>	Granules
<b>Odor</b>	Odorless
<b>Potential health effects</b>	
<b>Acute effects</b>	
<b>Eyes</b>	May cause severe eye irritation with corneal injury.
<b>Chronic effects</b>	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

Chemical Name	CAS-No	Weight %
Clopyralid Potassium Salt	58509-83-4	61.2
Flumetsulam	98967-40-9	18.9

### 4. FIRST AID MEASURES

Eye contact	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.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Notes to physician	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIRE-FIGHTING MEASURES

Flash Point	Not applicable
Sensitivity to Mechanical Impact	Not applicable
Sensitivity to Static Discharge	Not applicable
Suitable extinguishing media	Water fog, foam, carbon dioxide, dry chemical.
Protective equipment and precautions for firefighters	Toxic, irritating gases may be formed under fire conditions. Prevent runoff from fire control from entering streams, sewers, or drinking water supply. Use self-contained pressure-demand breathing apparatus if needed to prevent exposure to smoke or airborne toxins. As in any fire, wear firefighters bunker gear.
<b>NFPA</b>	
Health Hazard	0
Flammability	1
Stability	0
Special Hazards	-

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	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.
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 cleaning up	Contain the spill. Sweep up and shovel into suitable containers for disposal.
Other	For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

## 7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling.
Storage	Store in original container only. Keep in a dry place.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

<u>Exposure guidelines</u>	3,6-Dichloropicolinic acid (clopyralid): 10 mg per cubic meter; Flumetsulam: 3 mg per cubic meter
<u>Occupational exposure controls</u>	

<b>Engineering measures</b>	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.
<b><u>Personal Protective Equipment</u></b>	
<b>General Information</b>	Please refer to the product label for additional Personal Protective Equipment advisories. .
<b>Respiratory protection</b>	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge.
<b>Eye/face protection</b>	For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield
<b>Skin and body protection</b>	Wear suitable protective clothing. Protective shoes or boots.
<b>Hand protection</b>	Protective gloves
<b>Hygiene measures</b>	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 and gloves, including the inside, before re-use. Launder work clothing separately from regular household laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Tan to brown granules
<b>Physical state</b>	Granules
<b>Odor</b>	Odorless
<b>pH</b>	No information available.
<b>Melting Point/Range</b>	148-151 °C (based on active ingredient)
<b>Freezing point</b>	No information available
<b>Boiling Point/Range</b>	Not applicable
<b>Flash Point</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific Gravity</b>	Not applicable
<b>Water solubility</b>	Dispersible in water
<b>Percent volatile</b>	No information available
<b>Partition coefficient</b>	Not applicable
<b>Viscosity</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Clopyralid can react violently with aluminum above 110°C (230°F) when water is present. Avoid contact with aluminum
<b>Materials to avoid</b>	Aluminum
<b>Hazardous decomposition products</b>	May emit toxic fumes under fire conditions - carbon monoxide, carbon dioxide, nitrogen oxides, and hydrogen chloride.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute effects

**Eye contact** May cause severe eye irritation with corneal injury.

**LD50 Dermal** > 5000 mg/kg (rabbit)

**LD50 Oral** > 5000 mg/kg (Rat)

**LC50 Inhalation** > 5.21 mg/L 4 hr (Rat)

### Chronic effects

**Carcinogenicity** The active ingredients did not cause cancer in laboratory animals.

**Mutagenicity** Flumetsulam did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**Reproductive toxicity** None known

**Developmental Toxicity** Not teratogenic in animal studies

STOT - single exposure For the active ingredients, in animals, effects have been reported on the kidney and the liver. Other observations in animals include lethargy.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Clopyralid Potassium Salt (58509-83-4)				
Active Ingredient(s)	Duration	Species	Value	Units
Clopyralid	96 h LC50	Rainbow trout	700	mg/L

Flumetsulam (98967-40-9)				
Active Ingredient(s)	Duration	Species	Value	Units
	72 h EC50	Algae	>0.030	mg/L
	EC50 48 hr immobilisation test	Daphnia magna Water flea	>122	mg/L
	LD50	Bee	>100	µg/bee
	LD50	Bobwhite quail	>2000	mg/kg
	96 h LC50	Oncorhynchus mykiss (rainbow trout)	>122	mg/L
	LC50	Earthworm	>1000	mg/kg

### Environmental Fate

Clopyralid Potassium Salt (58509-83-4)		
Active Ingredient(s)	Type of Test	Result
Clopyralid	log Pow	1.81 - 2.55

Flumetsulam (98967-40-9)		
Active Ingredient(s)	Type of Test	Result
Flumetsulam	log Pow	0.21
	Stability in water	Stable to hydrolysis over a wide range of pH values.
	Biodegradation	Not readily biodegradable

**Other adverse effects** This product should not be applied 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 disposing of equipment washwaters.

**13. DISPOSAL CONSIDERATIONS**

<b>Waste disposal methods</b>	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.
<b>Contaminated packaging</b>	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**

<b><u>DOT</u></b>	This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.
<b><u>TDG</u></b>	Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Clopyralid Potassium Salt, Flumetsulam), 9, III, Marine Pollutant
<b><u>ICAO/IATA</u></b>	
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Clopyralid Potassium Salt, Flumetsulam), 9, III, Marine Pollutant
<b>Limited quantity</b>	30 kg G
<b><u>IMDG/IMO</u></b>	
<b>UN/ID No</b>	UN3077
<b>Proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard Class</b>	9
<b>Packing group</b>	III
<b>EmS No.</b>	F-A, S-F
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Clopyralid Potassium Salt, Flumetsulam), 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 does not contain any 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

**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.

**International Regulations****Mexico - Grade**

No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

not determined

**16. OTHER INFORMATION**

**Revision Date:** 2014-01-23  
**Reason for revision:** Initial Release.

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**End of Material Safety Data Sheet**