



SHREEJI PESTICIDES PVT. LTD
(A SUBSIDIARY OF WILLOWOOD CHEMICALS PVT. LTD)

Material safety data sheet Chlorimuron Ethyl 25% WP

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name : Chlorimuron Ethyl 25% WP
Chemical Name : ethyl 2-[(4-chloro-6-methoxypyrimidin-2-yl)carbamoylsulfamoyl] benzoate
Use of the Substance/Mixture : Herbicide
Information on manufacturer/Supplier Importer : SHREEJI PESTICIDES PVT LTD.
Plot No. 69/P, Village - Manjusar, Tal. Savli, Dist. Vadodara - 391775
Telephone : +91-2667-2264701

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Chlorimuron Ethyl 25% EP
B10611684

Components

Chemical Name	CAS-No.	Concentration
Chlorimuron ethyl	90982-32-4	20 - 30%
Kaolin	1332-58-7	30 - 50%
Quartz	14808-60-7	0.25 - 0.5%
Alkylphthalenesulfonic acid, sodium salt/formaldehyde polycondensate	68425-94-5	1 - 3%
Titanium dioxide	13463-67-7	0.5 - 1%
Sulfuric acid, mono-C12-16-alkyl esters, sodium salts	73296-89-6	0.5 - 1%
2-Amino-4-chloro-6-methoxypyrimidine	5734-64-5	0.1 - 0.25%

3. HAZARDS IDENTIFICATION

No information available.

4. FIRST AID MEASURES

General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.



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- Skin contact** : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye contact** : Hold eye 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 eye. Call a poison control center or doctor for treatment advice.
- Ingestion** : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media** : Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)
- Extinguishing media which shall not be used for safety reasons** : High volume water jet, (contamination risk)
- Special protective equipment for fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.
- Further information** : Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions** : Prevent material from entering sewers, waterways, or low areas.
- Methods for cleaning up** : Sweep up and shovel into suitable containers for disposal.
- Additional advice** : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling** : Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.
- Advice on protection against fire and explosion** : Keep away from heat and sources of ignition.



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Storage

Requirements for storage areas and containers : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Chemical Name	Occupational Exposure Limits		Regulation
		(PT MATTER)	
Sucrose	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values (2009)
Titanium dioxide	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values (2009)
Quartz	TWA	0.098 mg/m ³ ,.96 million particles / m ³ (Respirable dust.)	India. OELs. The Factories Act, The Second Schedule: Permissible Levels of Certain Chemical Substances in the Work Environment (2001)
	TWA	0.291 mg/m ³ ,.96 million particles / m ³ (Total dust.)	India. OELs. The Factories Act, The Second Schedule: Permissible Levels of Certain Chemical Substances in the Work Environment (2001)
	TWA	0.025 mg/m ³ (Respirable fraction.)	US. ACGIH Threshold Limit Values (01 2010)

Engineering measures

Use only with adequate ventilation.

Personal protective equipment

Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge. Provide adequate ventilation.

Hand protection : Material: Protective gloves

Eye protection : Wear protective eyewear to prevent contact with this substance.

Skin and body protection : Wear protective clothing such as gloves, apron, boots, or coveralls, as appropriate.

Hygiene measures : Wash hands thoroughly with soap and water after handling and before eating,



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drinking, chewing gum, using tobacco, or using the toilet. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.

Protective measures : All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. End users of this product should follow label instructions for personal protection when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid , wettable powder

pH : no data available

10. STABILITY AND REACTIVITY

Conditions to avoid : Exposure to moisture. Decomposes slowly on exposure to water. To avoid thermal decomposition, do not overheat. Under severe dusting conditions, this material may form explosive mixtures in air.

None reasonably foreseeable.

Materials to avoid : No materials to be especially mentioned.

Hazardous decomposition products : No information available.

Hazardous reactions : Polymerization will not occur. Stable at normal temperatures and storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50/rat : > 5,000 mg/kg

Acute oral toxicity

- Chlorimuron ethyl : LD50/rat : 4,102 mg/kg
- Kaolin : ALD/human : > 15,000 mg/kg
- Quartz : ALD/rat : > 11,000 mg/kg
- Titanium dioxide : LD50/rat : > 5,000 mg/kg
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : LD50/rat : > 2,000 mg/kg
- 2-Amino-4-chloro-6- : ALD/rat : 11,000 mg/kg



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methoxyypyrimidine
Acute inhalation toxicity : LC50/4 h/rat : > 5.0 mg/l

Acute inhalation toxicity

• Chlorimuron ethyl : LC50/4 h/rat : > 5.6 mg/l

• Kaolin : lung effects

• Quartz : //human :

Effects of breathing high concentration of respirable particles may include:
Breathing difficulties
Cough
Adverse body weight effects
Lung damage

• Titanium dioxide : LC50/4 h/rat : > 6.82 mg/l

• Sulfuric acid, mono-
C12-16-alkyl esters,
sodium salts : no data available

Acute dermal toxicity : LD50/rabbit : > 2,000 mg/kg

Acute dermal toxicity

• Chlorimuron ethyl : LD50/rabbit : > 2,000 mg/kg

• Quartz : No adverse effects expected.

• Sulfuric acid, mono-
C12-16-alkyl esters,
sodium salts : no data available

Skin irritation : rat

rabbit

Result: No skin irritation

Skin irritation

• Chlorimuron ethyl : guinea pig
Result: No skin irritation

• Kaolin : Result: No skin irritation The toxicological data has been taken from products of similar composition.

• Quartz : animals (unspecified species)
Classification: Not classified as irritant Result: No skin irritation

• Alkyl naphthalenesulfo
nic acid, sodium
salt/formaldehyde
polycondensate : animals (unspecified species)
Classification: Irritating to skin. Result: Skin irritation

• Titanium dioxide : rabbit



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Classification: Not classified as irritant Result: No skin irritation

- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : rabbit
Classification: Irritating to skin.
- 2-Amino-4-chloro-6-methoxypyrimidine : guinea pig
Result: No skin irritation

Eye irritation : rabbit
Result: slight irritation

Eye irritation

- Chlorimuron ethyl : rabbit
Result: No eye irritation
- Kaolin : Result: Mild eye irritation The toxicological data has been taken from products of similar composition.
- Quartz : animals (unspecified species)
Classification: Not classified as irritant Result: slight irritation
- Alkyl naphthalenesulfonic acid, sodium salt/formaldehyde polycondensate : animals (unspecified species)
Classification: Irritating to eyes. Result: Eye irritation
- Titanium dioxide : rabbit
Classification: Not classified as irritant Result: No eye irritation
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : rabbit
Classification: Irritating to eyes. Result: Severe eye irritation Risk of serious damage to eyes. May cause irreversible eye damage.
- 2-Amino-4-chloro-6-methoxypyrimidine : rabbit
Result: Eye irritation

Sensitisation : guinea pig Result: Did not cause sensitization on laboratory animals.

Sensitisation

- Chlorimuron ethyl : guinea pig Result: Animal test did not cause sensitization by skin contact.
- Kaolin : no data available
- Quartz : animals (unspecified species) Classification: Not a skin sensitizer. Result: Did not cause sensitization on laboratory animals.
- Titanium dioxide : Local lymph node test mouse Result: Did not cause sensitization on laboratory animals.

Buehler Test guinea pig Result: Did not cause sensitization on laboratory animals.
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : Maximisation Test guinea pig Classification: Not a skin sensitizer. Result: Did not cause sensitization on laboratory animals.



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• 2-Amino-4-chloro-6-methoxypyrimidine : guinea pig Result: Did not cause sensitization on laboratory animals.

Repeated dose toxicity

• Chlorimuron ethyl : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Dermal rabbit No toxicologically significant effects were found.

Oral dog Abnormal decrease in number of red blood cells

• Kaolin : Inhalation rat Fibrosis

• Quartz : Inhalation Fluid retention in lungs (pulmonary oedema) lung effects
Inflammation Chronic lung disease Fibrosis

• Titanium dioxide : Oral rat No toxicologically significant effects were found.

Inhalation rat No toxicologically significant effects were found.

• Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : no data available

• 2-Amino-4-chloro-6-methoxypyrimidine : Oral rat Lethargy Laboured breathing Weight loss Spleen effects Organ weight changes

Mutagenicity assessment

• Chlorimuron ethyl : Did not cause genetic damage in animals. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

• Quartz : Did not cause genetic damage in cultured bacterial cells. Did not cause genetic damage in animals. Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.

• Titanium dioxide : Did not cause genetic damage in animals. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

• Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : Evidence suggests this substance does not cause genetic damage in cultured bacterial cells.

• 2-Amino-4-chloro-6-methoxypyrimidine : Did not cause genetic damage in cultured bacterial cells. Has not been tested in animals.

Carcinogenicity assessment

• Chlorimuron ethyl : Animal testing did not show any carcinogenic effects.

• Quartz : An increased incidence of tumours was observed in laboratory animals. An increased risk of cancer in humans has been shown in workplace-based studies.

• Titanium dioxide : In lifetime inhalation studies rats were exposed for 2 years to respectively 10, 50 and 250 mg/m³ of respirable TiO₂. Slight lung fibrosis was observed at 50 and 250 mg/m³ levels. Microscopic lung tumours were also observed in 13 percent of the rats exposed to 250 mg/m³, an exposure level that caused lung overloading and impairment of rat lungs clearance mechanisms. In further studies, these tumours were found to occur only under particle overload conditions in a uniquely sensitive species, the rat, and have little or no relevance for humans. The pulmonary inflammatory response to TiO₂ particles exposure was also found to be much more severe in rats than in other rodent species. In



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February 2006, IARC has re-evaluated Titanium dioxide as pertaining to Group 2B: "possibly carcinogenic to humans", based upon inadequate evidence in humans and sufficient evidence in experimental animals for the carcinogenicity of titanium dioxide. IARC evaluation guidelines consider the generation of tumours, in 2 different studies within the same animal species, to be adequate criteria for an assessment of sufficient evidence. The conclusions of several epidemiology studies on more than 20000 TiO₂ industry workers in Europe and the USA did not suggest a carcinogenic effect of TiO₂ dust on the human lung. Mortality from other chronic diseases, including other respiratory diseases, was also not associated with exposure to TiO₂ dust. Based upon all available study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : no data available

Toxicity to reproduction assessment

- Chlorimuron ethyl : No toxicity to reproduction
- Quartz : No adverse effects expected.
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : no data available

Assessment teratogenicity

- Chlorimuron ethyl : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : no data available

12. ECOLOGICAL INFORMATION

Toxicity to fish

- Chlorimuron ethyl : LC50/96 h/Oncorhynchus mykiss (rainbow trout): > 1,000 mg/l
- Kaolin : LC50//Oncorhynchus mykiss (rainbow trout): 270 mg/l
- Titanium dioxide : LC50/96 h/Pimephales promelas (fathead minnow): > 1,000 mg/l
- Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : LC50/48 h/Leuciscus idus (Golden orfe): 4.1 mg/l
no data available

Toxicity to algae

- Chlorimuron ethyl : EC50/72 h/Algae: 1 ppb
- Titanium dioxide : EC50/72 h/Pseudokirchneriella subcapitata (green algae): 61 mg/l



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• Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : EC50/96 h/Algae: 42 mg/l
no data available

Aquatic toxicity

• Chlorimuron ethyl : EC50/48 h/Daphnia magna (Water flea): > 1,000 mg/l

• Titanium dioxide : EC50/48 h/Daphnia magna (Water flea): > 1,000 mg/l

• Sulfuric acid, mono-C12-16-alkyl esters, sodium salts : EC50/24 h/Daphnia magna (Water flea): 21.2 mg/l
no data available

Further information on ecology

Additional ecological information : See product label for additional application instructions relating to environmental precautions.

13. DISPOSAL CONSIDERATIONS

Product : In accordance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : Do not re-use empty containers.

14. TRANSPORT INFORMATION

IMDG

UN number : 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(Chlorimuron ethyl)
Class : 9
Packing group : III
Labelling No. : 9
Marine pollutant : yes (Chlorimuron ethyl)

IATA_C

UN number : 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(Chlorimuron ethyl)
Class : 9
Packing group : III
Labelling No. : 9MI

Hazchem Code : 2Z

15. REGULATORY INFORMATION

National regulatory information



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not regulated

Regulations in other countries

No information available.

16. OTHER INFORMATION

Sources of key data used to compile the Safety Data Sheet:

1. The Factories Act, 1948, The Second Schedule: Permissible levels of certain chemical substances in work environment, as amended through April, 2001
2. Manufacture, Storage and Import of Hazardous Chemical Rules 1989, as amended through January 2000
3. Insecticide Act, 1968 (46 of 1968, Dt. 2-9-1968)
4. Insecticide Rule, 1971 (GSR 1650, Dt. 9-10-1971)

Further information:

The information provided in this 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.

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