

SAFETY DATA SHEET



Bensulfuron Methyl + Pretilachlor

Version 2.0

Revision Date 23.06.2015

Document no. 130000050647

This SDS adheres to the standards and regulatory requirements of India and may not meet the regulatory requirements in other countries.

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

Product name : Bensulfuron Methyl + Pretilachlor

Other names : LONDAX POWER
C12335417

Recommended use of the chemical and restriction on use

Recommended use : Herbicide

Manufacturer, importer, supplier

Company : E. I. DuPont India Pvt. Ltd.
Street address : 7th Floor, Tower C, DLF Cyber Greens, Sector 25A, DLF City Phase III, Gurgaon -
122002, Haryana
India
Telephone : +91-124-2540900
Telefax : +91-124-2540889 / 90 / 91 / 92

Emergency telephone number : +91-124-4092888 / +91-124-2353777

2. HAZARDS IDENTIFICATION

Product hazard classification

Endpoints which are not classified, cannot be classified or are not applicable are not shown.
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

Chemical Name	CAS-No.	Concentration
Bensulfuron methyl	83055-99-6	0.6 %
Pretilachlor	51218-49-6	6 %
Paraffin oils	8012-95-1	1 - 5%
Other Ingredients		87.4 - 92.4%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

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.

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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	:	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. Never give anything by mouth to an unconscious person. Call a poison control center or doctor for treatment advice.
Most important symptoms/effects, acute and delayed	:	No information available.
Protection of first-aiders	:	No information available.
Notes to physician	:	No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
Unsuitable extinguishing media	:	High volume water jet, (contamination risk)
Specific hazards	:	No information available.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
Specific extinguishing methods	:	No information available.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. (on small fires) Cool containers/tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment.
Environmental precautions	:	Prevent material from entering sewers, waterways, or low areas.
Methods and materials for containment and cleaning up	:	Sweep up and shovel into suitable containers for disposal.
Additional advice	:	Dispose of in accordance with local regulations.

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7. HANDLING AND STORAGE**Handling**

Technical measures/Precautions : Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

Precautions for safe handling : Under severe dusting conditions, this material may form explosive mixtures in air.

Storage

Suitable storage conditions : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Chemical Name	Occupational Exposure Limits	Regulation
Paraffin oils		
STEL	10 mg/m ³ (Mist.)	IN OEL (2001)
TWA	5 mg/m ³ (Mist.)	IN OEL (2001)
TWA	5 mg/m ³ (Inhalable fraction.)	US ACGIH (2011)

Engineering measures : Use only with adequate ventilation.

Biological occupational exposure limits : No information available.

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.

Hand protection : Material: Protective gloves

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

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

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wash all protective clothing after use.

Protective measures : End users of this product should follow label instructions for personal protection when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance (Physical state, form, colour, etc.)

Physical state : solid
Form : dry, free flowing granules
Colour : light brown

Odour : not significant

Odour Threshold : No information available.

pH : 9 - 10.5
(1% solution)

Melting point/freezing point

No information available.

Initial boiling point and boiling range

No information available.

Flash point : No information available.

Evaporation rate : No information available.

Flammability (solid, gas) : No information available.

Upper/lower flammability or explosive limits

Upper explosion limit : No information available.
Lower explosion limit : No information available.

Vapour pressure : No information available.

Vapour density : No information available.

DensityDensity : 0.9 - 1.3 g/cm³**Solubility(ies)**

Water solubility : No information available.

Partition coefficient: n-octanol/water : No information available.

Auto-ignition temperature

No information available.

Decomposition temperature : No information available.

Viscosity

Viscosity, kinematic : No information available.

Molecular weight : No information available.

10. STABILITY AND REACTIVITY

Reactivity : No information available.

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Chemical stability	: Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	: No information available.
Conditions to avoid	: No information available.
Materials to avoid	: None reasonably foreseeable.
Hazardous decomposition products	: No information available.

11. TOXICOLOGICAL INFORMATION
Acute toxicity
Oral

Bensulfuron methyl	: LD50/Rat: > 5,000 mg/kg
Pretilachlor	: LD50/Mouse: 1,800 mg/kg
Paraffin oils	: LD50/Rat: > 5,000 mg/kg

Inhalation

Bensulfuron methyl	: LC50/4 h/Rat: > 7.5 mg/l
Pretilachlor	: Toxic effects can not be excluded

Dermal

Bensulfuron methyl	: LD50/Rabbit: > 2,000 mg/kg
Pretilachlor	: LD50/Rat: > 3,100 mg/kg
Paraffin oils	: LD50/Rabbit: > 2,000 mg/kg

Skin corrosion/irritation

Bensulfuron methyl	: Species: Rabbit Result: No skin irritation Classification: No skin irritation
Pretilachlor	: Species: Rabbit Result: Severe skin irritation Classification: Irritating to skin.
Paraffin oils	: Species: Not tested on animals Result: No skin irritation Classification: Not classified as irritant Method: OECD Test Guideline 404

Serious eye damage/eye irritation

Bensulfuron methyl	: Species: Rabbit Result: No eye irritation
Pretilachlor	: Species: Rabbit Result: Irritation to eyes, reversing within 7 days Classification: Mild eye irritation
Paraffin oils	: Species: multiple species Result: Mild eye irritation Classification: Irritating to eyes. Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Bensulfuron methyl	: Species: Guinea pig Result: Did not cause sensitisation on laboratory animals.
Paraffin oils	: Species: Not tested on animals Result: Does not cause skin sensitisation. Classification: Does not cause skin sensitisation.

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Germ cell mutagenicity

- Bensulfuron methyl : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.
- Paraffin oils : Animal testing did not show any mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.

Carcinogenicity

- Bensulfuron methyl : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.
- Paraffin oils : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.

Reproductive toxicity

- Bensulfuron methyl : Reproductive toxicity: No toxicity to reproduction
Animal testing showed no reproductive toxicity.
Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Specific Target Organ Toxicity

Specific target organ toxicity - single exposure

- Paraffin oils : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

- Paraffin oils : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

- Paraffin oils : The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Other

- Bensulfuron methyl : Repeated dose toxicity:
The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
Oral - feed/multiple species
Liver effects
Oral - feed/Rat/male 90 d
altered hematology
- Paraffin oils : Repeated dose toxicity:
Oral/multiple species
No toxicologically significant effects were found.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Acute and prolonged toxicity to fish

- Bensulfuron methyl : LC50/96 h/Oncorhynchus mykiss (rainbow trout): > 66 mg/l
- Pretilachlor : LC50/96 h/Oryzias latipes (Orange-red killifish): 2.4 mg/l

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Toxicity to aquatic plants	
Bensulfuron methyl	: EC50/14 d/Lemna gibba (duckweed): 0.0008 mg/l
Pretilachlor	: EC50/72 h/Pseudokirchneriella subcapitata (green algae): 0.0013 mg/l NOEC/72 h/Pseudokirchneriella subcapitata (green algae): 0.001 mg/l Method: OECD Test Guideline 201
Acute toxicity to aquatic invertebrates	
Pretilachlor	: EC50/48 h/Daphnia magna (Water flea): 7 mg/l
Paraffin oils	: EC50/48 h/Daphnia magna (Water flea): 0.021 mg/l
Chronic toxicity to fish	
Pretilachlor	: NOEC/9 d/Danio rerio (zebra fish): 1.5 mg/l Method: see user defined free text
Chronic toxicity to aquatic Invertebrates	
Pretilachlor	: NOEC/7 d/Ceriodaphnia dubia (water flea): 1.3 mg/l
Persistence and degradability	
Pretilachlor	: Result: Biodegradable
Paraffin oils	: Result: Not rapidly biodegradable
Bioaccumulation	
Pretilachlor	: no data available
Mobility in soil	
No information available.	
Other adverse effects	
No information available.	

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	: 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.
Class	: 9
Packing group	: III
Marine pollutant	: yes (Paraffin oils)

IATA

UN number	: 3077
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Paraffin oils)
Class	: 9
Packing group	: III

Matters needing attention for transportation : Not applicable

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Hazchem Code : 2Z

15. REGULATORY INFORMATION

Product subject to regulatory requirements under the Insecticides Act, 1968 and Insecticides Rules, 1971

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

References

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Significant change from previous version is denoted with a double bar.

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