



### LINEAGE® CLEARSTAND™ HERBICIDE

Version 2.0 / USA  
102000030345

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Revision Date: 10/28/2015  
Print Date: 10/28/2015

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Trade name** LINEAGE® CLEARSTAND™ HERBICIDE

**Product code (UVP)** 84069310

**SDS Number** 102000030345

**EPA Registration No.** 432-1578

### Relevant identified uses of the substance or mixture and uses advised against

**Use** Herbicide

**Restrictions on use** See product label for restrictions.

### Information on supplier

**Supplier** Bayer Environmental Science  
2 T.W. Alexander Drive  
Research Triangle PK, NC 27709  
United States

**Responsible Department** Email: SDSINFO.BCS-NA@bayer.com

### Emergency telephone no.

**Emergency Telephone Number (24hr/ 7 days)** 1-800-334-7577

**Product Information Telephone Number** 1-800-331-2867

## SECTION 2: HAZARDS IDENTIFICATION

### Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation: Category 2B

**Signal word:** Warning

### Hazard statements

Causes eye irritation.

### Precautionary statements

Wash face, hands and any exposed skin thoroughly after handling.

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

If eye irritation persists: Get medical advice/ attention.

### Other hazards

No other hazards known.

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Hazardous Component Name	CAS-No.	Concentration % by weight
imazapyr	81334-34-1	63.2
Metsulfuron-methyl	74223-64-6	9.5

**SECTION 4: FIRST AID MEASURES****Description of first aid measures**

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<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 physician or poison control center immediately.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Eye contact</b>	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 physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. 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. Do not leave victim unattended.

**Most important symptoms and effects, both acute and delayed****Symptoms** No symptoms known or expected.**Indication of any immediate medical attention and special treatment needed****Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.**SECTION 5: FIREFIGHTING MEASURES****Extinguishing media**

<b>Suitable</b>	Water spray, Foam, Dry chemical, Carbon dioxide (CO <sub>2</sub> )
<b>Unsuitable</b>	High volume water jet



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#### Advice for firefighters

<b>Special protective equipment for fire-fighters</b>	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
<b>Further information</b>	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
<b>Flash point</b>	not applicable
<b>Autoignition temperature</b>	no data available
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Explosivity</b>	no data available
<b>Dust explosion class</b>	no data available

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Precautions</b>	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
<b>Methods and materials for containment and cleaning up</b>	
<b>Methods for cleaning up</b>	Avoid dust formation. Use approved industrial vacuum cleaner for removal. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
<b>Additional advice</b>	Do not allow to enter soil, waterways or waste water canal.
<b>Reference to other sections</b>	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

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## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle and open container in a manner as to prevent spillage. Avoid dust formation. Use only in area provided with appropriate exhaust ventilation.
<b>Hygiene measures</b>	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

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Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage areas and containers** Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

No control parameters known.

**Exposure controls****Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory protection** When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

**Hand protection** Chemical resistant nitrile rubber gloves

**Eye protection** Safety glasses with side-shields

**Skin and body protection** Wear long-sleeved shirt and long pants and shoes plus socks.

**General protective measures** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.  
Keep and wash PPE separately from other laundry.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** white to light brown

**Physical State** solid granular

**Odor** very faint

**Odour Threshold** no data available

**pH** 5.2 - 6.0

**Vapor Pressure** no data available

**Vapor Density (Air = 1)** no data available

**Bulk density** 530 - 590 kg/m<sup>3</sup>



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<b>Evapouration rate</b>	not applicable
<b>Boiling Point</b>	not applicable
<b>Melting / Freezing Point</b>	not applicable
<b>Water solubility</b>	dispersible
<b>Minimum Ignition Energy</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>Partition coefficient: n-octanol/water</b>	not applicable
<b>Viscosity</b>	not applicable
<b>Flash point</b>	not applicable
<b>Autoignition temperature</b>	no data available
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Explosivity</b>	no data available
<b>Dust explosion class</b>	no data available

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#### SECTION 10: STABILITY AND REACTIVITY

##### Reactivity

<b>Thermal decomposition</b>	no data available
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	no data available
<b>Incompatible materials</b>	no data available
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

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#### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Exposure routes</b>	Skin Absorption, Eye contact, Inhalation, Ingestion
<b>Immediate Effects</b>	



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**Eye** Moderate eye irritation.  
**Skin** Harmful if absorbed through skin.

**Inhalation** Avoid breathing spray mist.

#### Information on toxicological effects

**Acute oral toxicity** LD50 (rat) > 5,000 mg/kg  
**Acute inhalation toxicity** LC50 (rat) > 5.1 mg/l  
Exposure time: 4 h  
**Acute dermal toxicity** LD50 (rabbit) > 2,000 mg/kg  
**Skin irritation** Irritating to skin. (rat)  
**Eye irritation** Moderate eye irritation. (rabbit)  
**Sensitisation** Non-sensitizing. (guinea pig)

#### ACGIH

None.

#### NTP

None.

#### IARC

None.

#### OSHA

None.

#### Further information

Only acute toxicity studies have been performed on the formulated product.

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## SECTION 12: ECOLOGICAL INFORMATION

**Toxicity to fish** LC50 (Oncorhynchus mykiss (rainbow trout)) > 100 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient imazapyr.  
LC50 (Lepomis macrochirus (Bluegill sunfish)) > 100 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient imazapyr.  
LC50 (Oncorhynchus mykiss (rainbow trout)) > 150 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient metsulfuron methyl.  
LC50 (Lepomis macrochirus (Bluegill sunfish)) > 150 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient metsulfuron methyl.



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<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) > 100 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imazapyr.
	EC50 (Daphnia magna (Water flea)) > 120 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metsulfuron methyl.
<b>Toxicity to aquatic plants</b>	EC50 (Anabaena flos-aquae (cyanobacterium)) 0.066 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient metsulfuron methyl.
	EC50 (Lemna minor (Common duck-weed)) 0.00036 mg/l Exposure time: 14 d The value mentioned relates to the active ingredient metsulfuron methyl.
<b>Environmental precautions</b>	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

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## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Product</b>	Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.
<b>Contaminated packaging</b>	Do not re-use empty containers. Triple rinse containers. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet.
<b>RCRA Information</b>	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

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## SECTION 14: TRANSPORT INFORMATION

49CFR

Not dangerous goods / not hazardous material



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#### IMDG

UN number	3077
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METSULFURON-METHYL MIXTURE)

#### IATA

UN number	3077
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METSULFURON-METHYL MIXTURE )

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

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### SECTION 15: REGULATORY INFORMATION

**EPA Registration No.** 432-1578

**US Federal Regulations**

**TSCA list**

None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

None.

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

None.

**Canadian Regulations**

**Canadian Domestic Substance List**

None.





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#### Environmental

##### CERCLA

None.

##### Clean Water Section 307 Priority Pollutants

None.

##### Safe Drinking Water Act Maximum Contaminant Levels

None.

#### EPA/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 required on the pesticide label:

**Signal word:** Caution!

**Hazard statements:** Harmful if absorbed through skin.  
Moderate eye irritation.  
Avoid contact with skin, eyes and clothing.  
Avoid breathing spray mist.

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## SECTION 16: OTHER INFORMATION

### Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
CAS-Nr.	Chemical Abstracts Service number
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	US. IARC Monographs on Occupational Exposures to Chemical Agents
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

# Bayer Environmental Science

## SAFETY DATA SHEET



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#### **NFPA 704 (National Fire Protection Association):**

Health - 2      Flammability - 1      Instability - 0      Others - none

#### **HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)**

Health - 1      Flammability - 1      Physical Hazard - 0      PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

**Reason for Revision:** New Safety Data Sheet.

**Revision Date:** 10/28/2015

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