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

Product identifier
Trade name: VIEWPOINT™ HERBICIDE
Product code (UVP): 84126101
SDS Number: 102000030344
EPA Registration No.: 432-1580

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 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
Dust may form explosive mixture in air.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>imazapyr</td>
<td>81334-34-1</td>
<td>31.6</td>
</tr>
<tr>
<td>Aminocyclopyrachlor</td>
<td>858956-08-8</td>
<td>22.8</td>
</tr>
<tr>
<td>Metsulfuron-methyl</td>
<td>74223-64-6</td>
<td>7.3</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice When possible, 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. 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.

Skin contact 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.

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 physician or poison control center immediately.

Ingestion 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 To date no symptoms are known.

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

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet
Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information

Use appropriate extinguishing media for material that is supplying fuel. Whenever possible, contain fire-fighting water by diking area with sand or earth. Fight fire from upwind position. Keep out of smoke. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point

not applicable

Autoignition temperature

no data available

Lower explosion limit

not applicable

Upper explosion limit

not applicable

Explosivity

no data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions

Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Avoid dust formation. Use personal protective equipment.

Methods and materials for containment and cleaning up

Methods for cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Dike area to prevent runoff.

Additional advice

Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

Reference to other sections

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Avoid dust formation. Handle and open container in a manner as to prevent spillage.

Hygiene measures

Wash hands thoroughly with soap and water after handling and before
eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove and wash contaminated gloves, including the inside, before re-use. Wash thoroughly and put on clean clothing. Remove soiled clothing immediately and clean thoroughly before using again.

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

**Requirements for storage areas and containers** 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. Store in original container and out of the reach of children, preferably in a locked storage area.

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

**Control parameters**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>10 mg/m3 (TWA)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Titanium dioxide (Total dust.)</td>
<td>13463-67-7</td>
<td>15 mg/m3 (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Titanium dioxide (Total dust.)</td>
<td>13463-67-7</td>
<td>10 mg/m3 (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Titanium dioxide (Total dust.)</td>
<td>13463-67-7</td>
<td>10 mg/m3 (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>5ug/m3 (AN ESL)</td>
<td>03 2014</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>50ug/m3 (ST ESL)</td>
<td>03 2014</td>
<td>TX ESL</td>
</tr>
</tbody>
</table>

**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.
## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>light beige to light brown</td>
</tr>
<tr>
<td>Physical State</td>
<td>extrusion granulate</td>
</tr>
<tr>
<td>Odor</td>
<td>slightly ammonia-like</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>5.4 - 6.2</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>no data available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.50 - 0.58 g/ml (loose)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting / Freezing Point</td>
<td>no data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>dispersible</td>
</tr>
<tr>
<td>Minimum Ignition Energy</td>
<td>no data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosivity</td>
<td>no data available</td>
</tr>
</tbody>
</table>

## SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td></td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>no data available</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No dangerous reaction known under conditions of normal use.</td>
</tr>
</tbody>
</table>
Conditions to avoid: no data available

Incompatible materials: no data available

Hazardous decomposition products: No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Skin contact, Eye contact, Inhalation

Immediate Effects:
- Eye: Moderate eye irritation.
- Skin: Slight irritation

Information on toxicological effects:
- Acute oral toxicity: LD50 (rat) > 5,000 mg/kg
- Acute inhalation toxicity: LC50 (rat) > 5.0 mg/l Exposure time: 4 h
- Acute dermal toxicity: LD50 (rabbit) > 2,000 mg/kg
- Skin irritation: Slight irritation (rat)
- Eye irritation: Slight irritation (rabbit)
- Sensitisation: Non-sensitizing. (guinea pig)

ACGIH
None.

NTP
None.

IARC
None.

OSHA
None.

Further information:
Information given is based on data on the components and the toxicology of similar products.

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 (Oncorhynchus mykiss (rainbow trout)) > 119 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient aminocyclopyrachlor.

LC50 (Oncorhynchus mykiss (rainbow trout)) > 150 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient metsulfuron methyl.

**Toxicity to aquatic invertebrates**

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)) 43 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient aminocyclopyrachlor.

EC50 (Daphnia magna (Water flea)) > 120 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient metsulfuron methyl.

**Toxicity to aquatic plants**

EC50 (Raphidocelis subcapitata (freshwater green alga)) > 122 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient aminocyclopyrachlor.

EC50 (Lemna minor (Common duck-weed)) 0.00036 mg/l
Exposure time: 14 d
The value mentioned relates to the active ingredient metsulfuron methyl.

**Environmental precautions**

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 contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Do not allow to get into surface water, drains and ground water.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Product**
Dispose in accordance with all local, state/provincial and federal regulations.
Do not contaminate water, food, or feed by disposal.
Follow advice on product label and/or leaflet.

**Contaminated packaging**
Do not re-use empty containers.
Triple rinse containers.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

**RCRA Information**

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

**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. 432-1580
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.

**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:**
Causes eye irritation.
Harmful if absorbed through skin.
Avoid contact with skin, eyes and clothing.
Avoid breathing dust or spray mist.
Wash thoroughly with soap and water after handling.
Remove and wash contaminated clothing before re-use.

---

**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

NFPA 704 (National Fire Protection Association):
  Health - 0 Flammability - 0 Instability - 0 Others - none

  Health - 0 Flammability - 0 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: 11/03/2015

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