1. Identification

Product identifier used on the label

EXTREME HERBICIDE

Recommended use of the chemical and restriction on use
Recommended use*: herbicide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 592101
EPA Registration number: 241-405
Synonyms: isopropylamine salts of imazethapyr & glyphosate

2. Hazards Identification


Classification of the product

<table>
<thead>
<tr>
<th>Eye Dam./Irrit.</th>
<th>Aquatic Acute</th>
<th>Aquatic Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2B</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Serious eye damage/eye irritation
Hazardous to the aquatic environment - acute
Hazardous to the aquatic environment - chronic

Label elements

Signal Word:
Safety Data Sheet
EXTREME HERBICIDE

Revision date: 2016/02/02
Version: 3.0
Page: 2/14

Warning

Hazard Statement:
H320 Causes eye irritation.
H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):
P273 Avoid release to the environment.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

Labeling of special preparations (GHS):
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity:
- 7 % dermal
- 7 % oral
- 9 % Inhalation - vapour
- 9 % Inhalation - mist


Emergency overview

WARNING:
KEEP OUT OF REACH OF CHILDREN.
Causes substantial but temporary eye injury.
HARMFUL IF ABSORBED THROUGH SKIN.
Do not get in eyes, on skin, or on clothing.
Avoid contact with the skin, eyes and clothing.

3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>38641-94-0</td>
<td>22.0 %</td>
<td>glyphosate-isopropylammonium</td>
</tr>
<tr>
<td>81335-77-5</td>
<td>1.8 %</td>
<td>imazethapyr</td>
</tr>
<tr>
<td>57-55-6</td>
<td>1.0 - 5.0%</td>
<td>Propylene glycol</td>
</tr>
<tr>
<td>75-31-0</td>
<td>1.0 - 5.0%</td>
<td>isopropylamine</td>
</tr>
<tr>
<td></td>
<td>65.0 - 75.0%</td>
<td>Proprietary ingredients</td>
</tr>
</tbody>
</table>
4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
foam, dry powder, carbon dioxide, water spray

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons, Phosphorus compounds

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions**
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

**Methods and material for containment and cleaning up**
Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

**Precautions for safe handling**
RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. Otherwise the product may react with such containers and tanks to evolve hydrogen gas that may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Protection against fire and explosion:
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

**Conditions for safe storage, including any incompatibilities**
Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed. Protect from temperatures below: 0 °C
Changes in the properties of the product may occur if substance/product is stored below indicated
temperature for extended periods of time.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated
temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective
equipment requirements.

Components with occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>PEL 5 ppm 12 mg/m3 ; TWA value 5 ppm 12 mg/m3 ; STEL value 10 ppm 24 mg/m3 ; ACGIH TLV STEL value 10 ppm ; TWA value 5 ppm ;</th>
</tr>
</thead>
<tbody>
<tr>
<td>isopropylamine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal
protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING
WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent)
TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and
vapours. For situations where the airborne concentrations may exceed the level for which an air
purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or
Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing
apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape
provisions.

Hand protection:
Chemical resistant protective gloves. Protective glove selection must be based on the user's
assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if
splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection,
apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
Wear long sleeved work shirt and long work pants in addition to other stated personal protective
equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance
with good industrial hygiene and safety practice. Personal protective equipment should be
decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if
necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing
separately. Hands and/or face should be washed before breaks and at the end of the shift. No
eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and
animal feeding stuffs.
9. Physical and Chemical Properties

Form: liquid
Odour: faint odour, amine-like
Odour threshold: Not determined due to potential health hazard by inhalation.
Colour: pale straw yellow
pH value: approx. 6 - 8
(cr 20 °C)
crystallization temperature: approx. 0 °C
Information based on the main components.
Boiling point: approx. 100 °C
(760 mmHg)
Information based on the main components.
Flash point: Non-flammable. A flash point determination is unnecessary due to the high water content.
Flammability: not applicable
Lower explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapour pressure: approx. 23.3 hPa
(20 °C)
Information applies to the solvent.
Density: 9.0965 Lb/USg
(68 °F)
Vapour density: not applicable
Information on: glyphosate-isopropylamine
Partitioning coefficient n-octanol/water (log Pow): -5.4
Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-
Partitioning coefficient n-octanol/water (log Pow): 1.49
(25 °C)
Self-ignition temperature: Based on the water content the product does not ignite. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Thermal decomposition: carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Phosphorus oxide, Hydrocarbons
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.
Viscosity, dynamic: approx. 7.14 mPa.s
(25 °C)
Solubility in water: emulsifiable
10. Stability and Reactivity

**Reactivity**
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
Corrosive effects to metal are not anticipated.

Oxidizing properties:
not fire-propagating

**Chemical stability**
The product is stable if stored and handled as prescribed/indicated.

**Possibility of hazardous reactions**
No hazardous reactions if stored and handled as prescribed/indicated.

**Conditions to avoid**

**Incompatible materials**
strong oxidizing agents

**Hazardous decomposition products**
Decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated. Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:
Possible thermal decomposition products:
carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Phosphorus oxide, Hydrocarbons
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.

11. Toxicological information

**Primary routes of exposure**
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute Toxicity/Effects**

**Acute toxicity**
Type of value: LD50  
Species: rat (male/female)  
Value: > 2,000 mg/kg (OECD Guideline 423)  
No mortality was observed.

**Inhalation**  
Type of value: LC50  
Species: rat (male/female)  
Value: > 5.359 mg/l (OECD Guideline 403)  
Exposure time: 4 h  
An aerosol with respirable particles was tested.

**Dermal**  
Type of value: LD50  
Species: rat (male/female)  
Value: > 4,000 mg/kg (OECD Guideline 402)  
No mortality was observed.

**Assessment other acute effects**  
Assessment of STOT single:  
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.  
The product has not been tested. The statement has been derived from the properties of the individual components.

**Irritation / corrosion**  
Assessment of irritating effects: May cause slight irritation to the skin. Causes substantial but temporary eye injury.

**Skin**  
May cause slight irritation to the skin.

**Eye**  
Causes substantial but temporary eye injury.

**Sensitization**  
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Skin sensitizing effects were not observed in animal studies.

**Chronic Toxicity/Effects**  

**Repeated dose toxicity**  
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: isopropylamine*  
Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

**Genetic toxicity**  
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

*Information on: imazethapyr*
Assessment of mutagenicity: No mutagenic effect was found in various tests with microorganisms and mammals.

Information on: glyphosate-isopropylamine
Assessment of mutagenicity: No mutagenic effect was found in various tests with microorganisms and mammals.

Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Information on: imazethapyr
Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Information on: glyphosate-isopropylamine
Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Information on: imazethapyr
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Information on: glyphosate-isopropylamine
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: imazethapyr
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: glyphosate-isopropylamine
Assessment of teratogenicity: Causes developmental effects in animals at high, maternally toxic doses.

Other Information
Misuse can be harmful to health.

Symptoms of Exposure
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.
12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Acute harm for fish. Very toxic (acute effect) to aquatic plants. Acutely harmful for aquatic invertebrates.

Toxicity to fish

*Information on: imazethapyr*
LC50 (96 h) 340 mg/l, Oncorhynchus mykiss (OPP 72-1 (EPA-Guideline), static)

*Information on: glyphosate-isopropylamine*
LC50 > 24 mg/l, Lepomis macrochirus (static)
LC50 > 86 mg/l, Oncorhynchus mykiss

Aquatic invertebrates

*Information on: imazethapyr*
LC50 (48 h) > 1,000 mg/l, Daphnia magna

*Information on: glyphosate-isopropylamine*
EC50 780 mg/l, Daphnia magna

Aquatic plants

*Information on: imazethapyr*
EC50 (96 h) 71 mg/l, Selenastrum capricornutum (OECD Guideline 201, static)
EC50 (14 d) 0.01 mg/l (growth rate), Lemna gibba

*Information on: glyphosate-isopropylamine*
EC50 12.5 mg/l, Chlorella pyrenoidosa

Assessment of terrestrial toxicity
With high probability not acutely harmful to terrestrial organisms.

Other terrestrial non-mammals

*Information on: imazethapyr*
LD50 > 100 ug/bee, Apis mellifera

*Information on: glyphosate-isopropylamine*
LD50 > 2,000 mg/kg, Colinus virginianus
LC50, Colinus virginianus
LC50, Anas platyrhynchos
LD50 > 100ug/bee, Apis mellifera

Persistence and degradability
Assessment biodegradation and elimination (H2O)

Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-

Not readily biodegradable (by OECD criteria).
Information on: glyphosate-isopropylamine
Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential
The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential
Information on: glyphosate-isopropylamine
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: glyphosate-isopropylamine
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-
Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

Other ecotoxicological advice:
The ecological data given are those of the active ingredient. Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
14. Transport Information

**Land transport**
USDOT

Not classified as a dangerous good under transport regulations

**Sea transport**
IMDG

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Air transport**
IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

15. Regulatory Information

**Federal Regulations**

Registration status:
Chemical TSCA, US blocked / not listed
Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute; Chronic

**CERCLA RQ**  
100 LBS

**CAS Number**  
75-31-0

**Chemical name**  
isopropylamine

**State regulations**
CA Prop. 65:
WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

Labeling requirements under FIFRA

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

WARNING:
KEEP OUT OF REACH OF CHILDREN.
Causes substantial but temporary eye injury.
HARMFUL IF ABSORBED THROUGH SKIN.
Do not get in eyes, on skin, or on clothing.
Avoid contact with the skin, eyes and clothing.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2016/02/02

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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