

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

Product name : Glufosinate-ammonium

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Acute toxicity, Oral (Category 4)

Reproductive toxicity (Category 1B)

Acute toxicity, Dermal (Category 4)

Acute toxicity, Inhalation (Category 4)

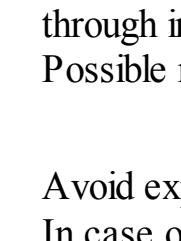
Specific target organ toxicity - repeated exposure (Category 2)

According to European Directive 67/548/EEC as amended.

Harmful by inhalation, in contact with skin and if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. May impair fertility. Possible risk of harm to the unborn child.

### Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

P201 Obtain special instructions before use.

P280 Wear protective gloves/ protective clothing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Hazard symbol(s)

T Toxic

R-phrase(s)

R60 May impair fertility.

R20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.

R48/20/22 Also harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R63 Possible risk of harm to the unborn child.

S-phrase(s)

S53 Avoid exposure - obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Restricted to professional users.

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 2-Amino-4-(hydroxymethylphosphinyl)butyric acidammonium salt  
DL-Phosphinotrichicin

Formula : C5H15N2O4P

Molecular Weight : 198,16 g/mol

CAS-No.	EC-No.	Classification	Concentration
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**Glufosinate ammonium**

77182-82-2	278-636-5	-	Acute Tox. 4; Repr. 1B; Acute Tox. 4; STOT RE 2; H302, H312, H332, H360, H373 T, Repr. Cat.2, Repr. Cat.3, R60 - R20/21/22 - R48/20/22 - R63
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For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

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

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form solid

### Safety data

pH no data available

Melting point 215 °C

Boiling point no data available

Flash point > 100 °C

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility no data available

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorus

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 1.620 mg/kg

LC50 Inhalation - rat - 4 h - 1.260 mg/m<sup>3</sup>

LD50 Dermal - rat - > 2.000 mg/kg

### Skin corrosion/irritation

Skin - rabbit - No skin irritation

### Serious eye damage/eye irritation

Eyes - rabbit - No eye irritation

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Suspected human reproductive toxicant

### Reproductive toxicity - Oral

Material Effects: Other effects - Oral

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

no data available

### Potential health effects

Inhalation Harmful if inhaled. May cause respiratory tract irritation.

Skin Harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

### Signs and Symptoms of Exposure

The above information is believed to be correct but does not purport to be all inclusive of all possible information. It is given only as a guide. The information in this document is based on the present state of our knowledge.

It does not represent any guarantee of the properties of the product. LookChem shall not be held liable for any damage resulting from handling or from any use of the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

### Additional Information

RTECS: EK713600

## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 710 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 560 mg/l - 48 h

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with afterburner and scrubber.

Contaminated packaging

## 14. TRANSPORT INFORMATION