



# Safety Data Sheet

SDS No.:  
SDS-P/L-B/01

Bezorol 18 SL

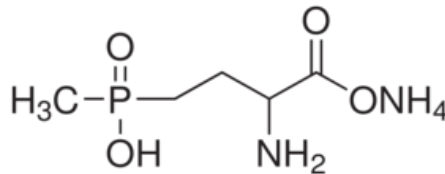
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## Section 1: Identification of the Hazardous Chemical and of the Supplier

### 1.1 Product Identifier

Product Name: Glufosinate ammonium 18% SL  
Trade Name: Bezorol 18 SL  
Active Ingredient: Ammonium (2RS)-2-amino-4-(methylphosphinato) butyric acid  
CAS No.(AI): 77182-82-2  
Structural Formula:



Recommended Usage: Herbicide

### 1.2 Supplier's Information

Address: Agricultural Chemicals (M) Sdn. Bhd.  
962, Lorong Perusahaan 8  
Taman Perindustrian Perai  
13600 Perai, Pulau Pinang  
Malaysia  
Tel.: +6-04-3907988  
Fax: +6-04-3905703  
Web: [www.agrichem.com.my](http://www.agrichem.com.my)  
Emergency Phone: +6-04-3907988

## Section 2: Hazard Identification

Classification: Eye irritation: Category 2

Pictogram:



Signal Word: Warning

Hazard Statement:  
H319: Causes serious eye irritation.

Precautionary Statement:  
P264: Wash face and hands thoroughly after handling.



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P280: Wear protective gloves/protective clothing/eye protection/face protection.

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+P313: If eye irritation persists: Get medical advice/attention.

## Section 3: Composition and Information of the Ingredients of the Hazardous Chemical

Component	CAS No.	Weight, %	Hazard Code
Glufosinate Ammonium	77182-82-2	18.00%	-
Adjuvant	-	1 % to < 3%	H315, H318

## Section 4: First-aid Measures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing.

Skin Contact: Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye Contact: 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.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Symptoms: No data available.

Notes to Physician: Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

## Section 5: Fire-fighting Measures

Suitable Extinguishing Media: Dry chemical, CO<sub>2</sub>, or water spray for small fire. For large fire use foam or water.

Specific Hazard During Fire: No data available.

Special Protective Equipment: Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Move containers from fire area if without risk. Cool containers with water from maximum distance.



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## Section 6: Accidental Release Measures

Personal Precautions:	Do not handle until all safety precautions have been read and understood.
Environmental Precautions:	Avoid runoff to waterways and sewers. Avoid release to the environment. Collect spillage.
Method for Cleaning Up:	Wear protective clothing as indicated in Section 8. Evacuate non essential personnel. Absorb spills with inert material such as clay, sand, earth, sawdust etc. and collect in a drum. Cover up the contaminated area with household detergent and small amount of water. Brush the slurry and spread inert absorbents on the slurry liquid and collect the absorbed material in a drum. Seal drum and dispose of. Do not contaminate water resources.

## Section 7: Handling and Storage

Precautions for Safe Handling:	Wear protective gloves/protective clothing/eye protection/face protection. Wash face and hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid breathing fume/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
Conditions for Safe Storage:	Keep in original container, tightly closed, in a cool dry and well-ventilated place, out of reach of children. Keep away from food, drink and animal feeding stuff. Keep away from heat/sparks/open flames/hot surfaces –No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Store locked up.
Incompatibles:	No data available.

## Section 8: Exposure Control and Personal Protection

Exposure Limit:	Not specified.
Engineering Control:	Handle only in ventilated area.
Individual Protection Measure:	Avoid inhalation. Always wash hands thoroughly before eating or drinking. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin and eyes.
Personal Protective Equipment:	
Eye Protection:	Wear safety goggles or face shield.
Skin Protection:	Wear suitable protective clothing, impermeable rubber gloves (such as neoprene or PVC) and boots.
Respiratory Protection:	In case of spill, leak, or emergency, use approved chemical cartridge-type respirator.



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## Section 9: Physical and Chemical Properties

Appearance:	Yellowish transparent liquid
Odour:	Characteristic odour
Odour Threshold:	No data available
pH:	No data available
Melting/Freezing Point:	216.5°C (technical)
Initial Boiling Point:	No data available
Boiling Range:	No data available
Flash Point:	Not applicable
Evaporation Rate:	No data available
Flammability:	No data available
Upper Flammability Limit:	No data available
Lower Flammability Limit:	No data available
Vapour Pressure:	$3.10 \times 10^{-2}$ mPa at 25°C (technical)
Vapour Density:	No data available
Relative Density:	No data available
Solubility in Water:	Soluble in water
Partition Coefficient $P_{o/w}$ :	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	No data available

## Section 10: Stability and Reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable under normal conditions.
Hazardous Reaction:	No data available.
Condition to Avoid:	Avoid extreme heat.
Incompatible Material:	No data available
Hazardous Decomposition Product:	No data available

## Section 11: Toxicological Information

### 11.1 Acute Toxicity

Ingestion, Oral LD <sub>50</sub> :	
Rat (female)	>5000mg/kg
Skin Contact, Dermal LD <sub>50</sub> :	
Rat (male/female)	>2000mg/kg

### 11.2 Chronic Effect from Short and Long Term Exposure

Skin Contact:	No data available
Eye Contact:	Causes serious eye irritation



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Inhalation: No data available  
Ingestion: No data available  
Carcinogenicity: No data available  
Mutagenicity: No data available  
Teratogenicity: No data available

11.3 Symptoms No data available.

## Section 12: Ecological Information

Ecotoxicity:

Component: Glufosinate Ammonium Technical

Aquatic Toxicity:		
	Fish (Rainbow trout), LC <sub>50</sub> (96h)	710 mg/l
	Fish (Carp, bluegill sunfish, golden orfe), LC <sub>50</sub> (96h)	>1000 mg/l
	Daphnia, LC <sub>50</sub> (48h)	560-1000 mg/l
	Algae ( <i>Scenedesmus subspicatus</i> ), EC <sub>50</sub>	1000 mg/l
	Algae ( <i>Selenastrum capricornutum</i> ), EC <sub>50</sub>	37 mg/l

Persistence and Degradability: No data available  
Bioaccumulative Potential: No data available  
Mobility in Soil: No data available  
Other Adverse Effect: No data available

## Section 13: Disposal Information

Dispose of contents/container to KualitiAlam / authorized body by DOE.

## Section 14: Transportation Information

Land (ADR/RID)

Proper Shipping Name	Pesticide, Liquid, Toxic, N.O.S.
Hazard Class	6.1
Hazchem Code	-
UN number	2902
Packing Group	III
Label / Mark	6
Sea (IMDG)	
Proper Shipping Name	Pesticide, Liquid, Toxic, N.O.S.
Hazard Class	6.1
UN Number	2902



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Packing Group	III
Marine Pollutant	-
Label	6
Transport Document Name	-
Air (IATA)	
Proper Shipping Name	Pesticide, Liquid, Toxic, N.O.S.
Hazard Class	6.1
UN number	2902
Packing Group	III
Label / Mark	6
Transport Document Name	-

## Section 15: Regulatory Information

Classification: Eye irritation:Category 2

Signal Word: Warning

Pictogram:



Pesticides Act: Class III  
Classification: Harmful

## Section 16: Other Information

Date of Preparation: 22 July 2015  
Date of Revision: -  
Reference Document: ICOP on Chemicals Classification and Hazard Communication 2014  
GHS Purple Book  
MSDS: Bezorol 18SL, Date of Preparation: 31-5-2013  
Toxicological Report on Acute Oral and Acute Dermal Toxicity of  
Glufosinate-ammonium 18% SL in Rats, USM 2013

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.