

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 25.10.2016  
Product: **ARSENAL XPRESS HERBICIDE**

Version: 3.0

(30665429/SDS\_CPA\_AU/EN)

Date of print 26.10.2016

## 1. Substance/preparation and manufacturer/supplier identification

### ARSENAL XPRESS HERBICIDE

Use: crop protection product, herbicide

Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)  
Level 12, 28 Freshwater Place Southbank  
Victoria 3006, AUSTRALIA  
Telephone: +61 3 8855-6600  
Telefax number: +61 3 8855-6511

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]  
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

## 2. Hazard identification

Classification of the substance and mixture:

Acute toxicity: Cat. 4 (Inhalation - vapour)

Acute toxicity: Cat. 5 (oral)

Serious eye damage/eye irritation: Cat. 1

Hazardous to the aquatic environment - acute: Cat. 1

Hazardous to the aquatic environment - chronic: Cat. 1

Label elements and precautionary statement:

Pictogram:



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Signal Word:  
Danger

**Hazard Statement:**

Causes serious eye damage. Harmful if inhaled. May be harmful if swallowed. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**Precautionary Statements (Prevention):**

Do not breathe the mist or vapour. Use only outdoors or in a well-ventilated area. Wear eye/face protection.

**Precautionary Statements (Response):**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Collect spillage.

**Precautionary Statements (Disposal):**

Dispose of contents/container to hazardous or special waste collection point.

**Other hazards which do not result in classification:**

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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### 3. Composition/information on ingredients

**Chemical nature**

crop protection product, herbicide, Soluble concentrate (SL)

Contains: imazapyr isopropylamine salt, glyphosate-isopropylamine

**Hazardous ingredients**

imazapyr

Content (W/W): 13.4 %  
CAS Number: 81334-34-1

Eye Dam./Irrit.: Cat. 2A  
Aquatic Acute: Cat. 3

Glyphosate

Content (W/W): 13.4 %  
CAS Number: 1071-83-6

Eye Dam./Irrit.: Cat. 1  
Aquatic Acute: Cat. 2  
Aquatic Chronic: Cat. 2

| D-Glucopyranose, oligomers, decyl octyl glycosides

Content (W/W): < 6 %  
CAS Number: 68515-73-1

Eye Dam./Irrit.: Cat. 1  
Aquatic Acute: Cat. 3

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## 4. First-Aid Measures

### General advice:

Remove contaminated clothing.

### If inhaled:

Immediately administer a corticosteroid from a controlled/metered dose inhaler. Keep patient calm, remove to fresh air, seek medical attention.

### On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

### On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

### On ingestion:

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

### Note to physician:

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.

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

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## 5. Fire-Fighting Measures

### Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

### Specific hazards:

carbon monoxide, carbon dioxide, nitrogen oxides, Phosphorus compounds

The substances/groups of substances mentioned can be released in case of fire.

### Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

### Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## 6. Accidental Release Measures

### Personal precautions:

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.

### Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Cleaning operations should be carried out only while wearing breathing apparatus.

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## 7. Handling and Storage

### Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

### Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

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.

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

isopropylamine, 75-31-0;

STEL value 10 ppm (ACGIHTLV)

TWA value 5 ppm (ACGIHTLV)

STEL value 24 mg/m<sup>3</sup> ; 10 ppm (AU NOEL)

TWA value 12 mg/m<sup>3</sup> ; 5 ppm (AU NOEL)

STEL value 24 mg/m<sup>3</sup> ; 10 ppm (OEL (AU))

TWA value 12 mg/m<sup>3</sup> ; 5 ppm (OEL (AU))

### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

**Hand protection:**

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

**Eye protection:**

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

**General safety and hygiene measures:**

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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## 9. Physical and Chemical Properties

Form: liquid, slightly viscous  
Colour: amber  
Odour: faint odour  
Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 6 - 8  
(approx. 21 °C)

Freezing point: approx. 0 °C  
Information applies to the solvent.

Boiling point: approx. 100 °C  
Information applies to the solvent.

Flash point: > 95 °C

Evaporation rate:  
not applicable

Flammability (solid/gas): not flammable

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.

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Ignition temperature: Based on the water content the product does not ignite.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Vapour pressure: approx. 23.4 hPa  
(20 °C)  
Information applies to the solvent.

Density: approx. 1.1 g/cm<sup>3</sup>  
(approx. 20 °C)

Relative vapour density (air): not applicable

Solubility in water: soluble

Information on: Glyphosate

Partitioning coefficient n-octanol/water (log Pow): < -3.2  
(20 °C; pH value: 2 - 5)

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Viscosity, dynamic: approx. 21.6 mPa.s  
(approx. 25 °C)

Other Information:  
If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

Conditions to avoid:  
See MSDS section 7 - Handling and storage.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:  
strong oxidizing agents, strong bases, strong acids

Hazardous reactions:  
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:

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Virtually nontoxic after a single skin contact. Of low toxicity after single ingestion. Of moderate toxicity after short-term inhalation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg

LC50 rat (by inhalation): 4.671 mg/l 4 h

An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg

No mortality was observed.

### **Irritation**

Assessment of irritating effects:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. May cause severe damage to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit:

### **Respiratory/Skin sensitization**

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

guinea pig:

### **Germ cell mutagenicity**

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.

### **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.

### **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.

### **Developmental toxicity**

**Assessment of teratogenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

**Specific target organ toxicity (single exposure):****Assessment of STOT single:**

The available information is not sufficient for the evaluation of specific target organ toxicity.

**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)****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.

**Aspiration hazard**

No aspiration hazard expected.

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

**Other relevant toxicity information**

Misuse can be harmful to health.

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**12. Ecological Information****Ecotoxicity****Assessment of aquatic toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Information on: Imazapyr

**Toxicity to fish:**

LC50 (96 h) > 100 mg/l, *Oncorhynchus mykiss*

Information on: Glyphosate

**Toxicity to fish:**

LC50 (96 h) 63.24 mg/l, *Oncorhynchus mykiss* (other)

Information on: Imazapyr

**Aquatic invertebrates:**



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EC50 (48 h) > 100 mg/l, Daphnia magna

Information on: Glyphosate  
Aquatic invertebrates:  
EC50 (96 h) 243.6 mg/l, Daphnia magna (other)  
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Information on: Imazapyr  
Aquatic plants:  
EC50 (7 d) 11.7 mg/l, Anabaena flos-aquae

No observed effect concentration 5.26 mg/l, Anabaena flos-aquae

Information on: Glyphosate  
Aquatic plants:  
EC50 (96 h) 49.1 mg/l, Selenastrum capricornutum (other)  
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## Mobility

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: Imazapyr  
Assessment transport between environmental compartments:  
The substance will not evaporate into the atmosphere from the water surface.  
Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Information on: Glyphosate  
Assessment transport between environmental compartments:  
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.  
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## Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):  
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Imazapyr  
Assessment biodegradation and elimination (H<sub>2</sub>O):  
Not readily biodegradable (by OECD criteria).

Information on: Glyphosate  
Assessment biodegradation and elimination (H<sub>2</sub>O):  
Not readily biodegradable (by OECD criteria).  
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## Bioaccumulation potential

Assessment bioaccumulation potential:

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

Information on: Imazapyr  
Assessment bioaccumulation potential:  
Does not accumulate in organisms.

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

Other ecotoxicological advice:  
Do not discharge product into the environment without control.

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## 13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:  
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Domestic transport:

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

### Further information

Hazchem Code:3Z  
IERG Number:47

### 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. (contains IMAZAPYR)

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**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. (contains IMAZAPYR)

**Further information**

Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subjected to the Australian Dangerous Goods Code when transported by road or rail in packagings not exceeding 500 kg(L) or IBCs.

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**15. Regulatory Information****Other regulations**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5

**Registration status:**

AICS, AU	released w/o restriction f. BASF / not listed
APVMA Approval 55756	

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**16. Other Information**

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.