

# Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 02.12.2022 Version: 1.0

Product: **Arsenal Power** 

(ID no. 30562412/SDS\_CPA\_ZA/EN)

Date of print 18.02.2025

# 1. Identification

# **Product identifier**

# **Arsenal Power**

# Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, herbicide

# Details of the supplier of the safety data sheet

Company:
BASF South Africa (Pty) Ltd
852 Sixteenth Road
Midrand
P O Box 2801
Halfway House 1685
SOUTH AFRICA

Telephone: +27 11 203 2400

# **Emergency telephone number**

National emergency number: +27 11 203 2420 International emergency number:

Telephone: +49 180 2273-112

# 2. Hazards Identification

# Classification of the substance or mixture

According to UN GHS criteria

Skin Sens. 1

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For the classifications not written out in full in this section the full text can be found in section 16.

### Label elements

# Globally Harmonized System (GHS)

### Pictogram:



# Signal Word: Warning

### Hazard Statement:

H317 May cause an allergic skin reaction.

### **Precautionary Statement:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

# Precautionary Statements (Prevention):

P280 Wear protective gloves.

P261 Avoid breathing mist or vapour or spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

### Precautionary Statements (Response):

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

# Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste

collection point.

### Other hazards

# According to UN GHS criteria

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.

# 3. Composition/Information on Ingredients

### **Substances**

Not applicable

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### **Mixtures**

# Chemical nature

herbicide, crop protection product, Soluble concentrate (SL)

# Hazardous ingredients (GHS)

According to UN GHS criteria

imazapyr (ISO); 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridine carboxylate

Content (W/W): 21.82 % Eye Dam./Irrit. 2B CAS Number: 81334-34-1 Aquatic Acute 3 REACH registration number: 01- H320, H402

2120754127-55

INDEX-Number: 613-126-00-1

Oxirane, methyl-, polymer with oxirane, mono-C10-16-alkyl ethers, phosphates

Content (W/W): < 25 % Acute Tox. 5 (oral)

CAS Number: 68649-29-6 Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

Aquatic Acute 2

H318, H315, H303, H401

Isopropylamine

Content (W/W): < 15 % Flam. Lig. 1

CAS Number: 75-31-0 Acute Tox. 3 (Inhalation - vapour)

EC-Number: 200-860-9 Acute Tox. 3 (oral)
INDEX-Number: 612-007-00-1 Skin Corr./Irrit. 1A
Eye Dam./Irrit. 1

STOT SE 3 (irr. to respiratory syst.)

Aquatic Acute 3

H224, H335, H314, H301 + H311 + H331, H402

Orthophosphoric acid

Content (W/W): < 10 % Met. Corr. 1
CAS Number: 7664-38-2 Acute Tox. 4 (oral)
EC-Number: 231-633-2 Skin Corr./Irrit. 1B
INDEX-Number: 015-011-00-6 Eye Dam./Irrit. 1
H290, H302, H314

11230, 11302, 11314

Specific concentration limit:
Skin Corr./Irrit. 1B: >= 25 %
Eye Dam./Irrit. 2: 10 - < 25 %
Skin Corr./Irrit. 2: 10 - < 25 %

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Content (W/W): < 5 % CAS Number: 57-55-6 EC-Number: 200-338-0

For the classifications not written out in full in this section the full text can be found in section 16.

#### 4. First-Aid Measures

# **Description of first aid measures**

Remove contaminated clothing.

If inhaled:

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

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

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

# Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

# Indication of any immediate medical attention and special treatment needed

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

# 5. Fire-Fighting Measures

# **Extinguishing media**

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

### Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, Hydrogen chloride, nitrogen oxides, halogenated compounds, Phosphorus compounds

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

### Advice for fire-fighters

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

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or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

# 6. Accidental Release Measures

# Personal precautions, protective equipment and emergency procedures

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 and material for containment and cleaning 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. Wear suitable protective equipment.

# 7. Handling and Storage

### Precautions for safe 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.

# Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

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

Storage stability:

Storage duration: 24 Months

# Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

# 8. Exposure Controls/Personal Protection

# **Control parameters**

Components with occupational exposure limits

No occupational exposure limits known.

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# **Exposure controls**

### 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 ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): 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.

# 9. Physical and Chemical Properties

# Information on basic physical and chemical properties

Form: liquid

Colour: transparent

light yellow

Odour: odourless

Odour threshold:

not applicable, odour not perceivable

pH value: approx. 6 - 8

(25 °C)

Freezing point: approx. 0 °C

(1,013.3 hPa)

Information applies to the solvent.

Boiling point: approx. 100 °C

(1,013.3 hPa)

Information applies to the solvent.

Flash point:

A flash point determination is unnecessary due to the high water

content.

Evaporation rate:

not applicable

Flammability: not applicable

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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.

Ignition temperature:

Based on the water content the

product does not ignite.

Vapour pressure: approx. 23.3 hPa

(20 °C)

Information applies to the solvent.

Density: approx. 1.10 g/cm3

(20 °C)

Relative vapour density (air):

not applicable

Solubility in water: miscible

Partitioning coefficient n-octanol/water (log Kow):

not applicable

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

Viscosity, dynamic: 163.2 mPa.s

(20 °C)

Explosion hazard: Based on the water content the

product has no explosive properties.

Fire promoting properties: Based on its structural properties

the product is not classified as

oxidizing.

# Other information

Other Information:

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

# 10. Stability and Reactivity

### Reactivity

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

Corrosion to metals: Corrosive effect on: brass mild steel

# **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.

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### Conditions to avoid

See SDS section 7 - Handling and storage.

# Incompatible materials

Substances to avoid:

strong oxidizing agents, strong bases, strong acids

# Hazardous decomposition products

Hazardous decomposition products:

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

# 11. Toxicological Information

# Information on toxicological effects

### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

No mortality was observed.

LC50 rat (by inhalation): > 5.5 mg/l 4 h

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

LD50 rabbit (dermal): > 5,000 mg/kg (OECD Guideline 402)

No mortality was observed.

### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant

# Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Experimental/calculated data:

modified Buehler test guinea pig: sensitizing (OECD Guideline 406)

# Germ cell mutagenicity

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### 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:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

### 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.

Information on: Orthophosphoric acid Assessment of repeated dose toxicity:

The substance may lead to shifts in blood composition following repeated exposure in animal experiments.

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# Aspiration hazard

### No aspiration hazard expected.

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

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### Other relevant toxicity information

Misuse can be harmful to health.

# 12. Ecological Information

# **Toxicity**

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:

LC50 (96 h) > 120 mg/l, Cyprinus carpio

Aquatic invertebrates:

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

Aquatic plants:

EC50 (72 h) > 100 mg/l, Pseudokirchneriella subcapitata

No observed effect concentration 25 mg/l, Pseudokirchneriella subcapitata

EC10 (72 h) 75.8 mg/l, Pseudokirchneriella subcapitata

# Persistence and degradability

Assessment biodegradation and elimination (H2O):

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

Information on: imazapyr (ISO); 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridine carboxylate

Assessment biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

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# **Bioaccumulative potential**

Assessment bioaccumulation potential:

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

Information on: imazapyr (ISO); 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridine carboxylate

Bioaccumulation potential:

Bioconcentration factor: < 1.0, Lepomis macrochirus

Does not accumulate in organisms.

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# Mobility in soil

Assessment transport between environmental compartments:

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Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: imazapyr (ISO); 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridine carboxylate

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

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### Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

# 13. Disposal Considerations

### Waste treatment methods

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.

# 14. Transport Information

### Land transport

**ADR** 

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

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**RID** 

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

# **Inland waterway transport**

ADN

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user:

Transport in inland waterway vessel

Not evaluated

### Sea transport

**IMDG** 

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Not applicable
Not applicable
Not applicable

Special precautions for

user

Not applicable None known

# Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

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# Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

# 15. Regulatory Information

# Safety, health and environmental regulations/legislation specific for the substance or mixture

To avoid risks to man and the environment, comply with the instructions for use.

### 16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Skin Sens. Skin sensitization

Eye Dam./Irrit. Serious eye damage/eye irritation

Aquatic Acute Hazardous to the aquatic environment - acute

Acute Tox. Acute toxicity

Skin Corr./Irrit. Skin corrosion/irritation Flam. Liq. Flammable liquids

STOT SE Specific target organ toxicity — single exposure

Met. Corr.Corrosive to metalsH320Causes eye irritation.H402Harmful to aquatic life.

H318 Causes serious eye damage. H315 Causes skin irritation.

H303 May be harmful if swallowed.

H401 Toxic to aquatic life.

H224 Extremely flammable liquid and vapour.

H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H290 May be corrosive to metals. H302 Harmful if swallowed.

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.

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