

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

- **Trade name: Dicarzol® 50SP**
- **CAS Number: 23422-53-9, 12125-02-9**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

- **Sector of Use** Agriculture
- **Application of the substance / the mixture** Agricultural Insecticide

**1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**  
Gowan Crop Protection Limited  
Highlands House Basingstoke Road  
Spencers Wood  
Reading  
Berkshire  
England  
RG7 1NT  
Tel +44 0 1582 280390

- **Further information obtainable from:** sds@gowanco.com

**1.4 Emergency telephone number:**

- Chemtrec Emergency Telephone 24 - Hours: (London) +44 870 820 0418  
Outside london: +1 703 527-3887

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 2      H300 Fatal if swallowed.

Acute Tox. 2      H330 Fatal if inhaled.



GHS09 environment

Aquatic Acute 1      H400 Very toxic to aquatic life.

Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Sens. 1      H317 May cause an allergic skin reaction.

**2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**

GHS06 GHS09

· **Signal word** *Danger*· **Hazard-determining components of labelling:**

formetanate hydrochloride  
ammonium chloride

· **Hazard statements**

H300+H330 *Fatal if swallowed or if inhaled.*  
H317 *May cause an allergic skin reaction.*  
H410 *Very toxic to aquatic life with long lasting effects.*

· **Precautionary statements**

P260 *Do not breathe dust/fume/gas/mist/vapours/spray.*  
P273 *Avoid release to the environment.*  
P280 *Wear protective gloves/protective clothing/eye protection/face protection.*  
P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*  
P304+P340 *IF INHALED: Remove person to fresh air and keep comfortable for breathing.*  
P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Additional information:**

EUH208 *Contains formetanate hydrochloride. May produce an allergic reaction.*  
EUH401 *To avoid risk to human health and the environment, comply with instructions for use.*

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 23422-53-9 EINECS: 245-656-0 Index number: 006-052-00-0	formetanate hydrochloride ⚠ Acute Tox. 2, H300; Acute Tox. 2, H330; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sens. 1, H317	50.0%
CAS: 12125-02-9 EINECS: 235-186-4 Index number: 017-014-00-8	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	30.9%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **General information:**

*Immediately remove any clothing soiled by the product.*  
*Remove breathing equipment only after contaminated clothing have been completely removed.*  
*In case of irregular breathing or respiratory arrest provide artificial respiration.*

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- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### **SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**  
· **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**  
· **Protective equipment:** Mouth respiratory protective device.

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Thorough dedusting.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of dust.  
· **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**  
· **Storage:**  
· **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.  
· **Information about storage in one common storage facility:** Store this product away from food or feed.  
· **Further information about storage conditions:** Keep container tightly sealed.

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· 7.3 **Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· 8.1 **Control parameters**· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.· 8.2 **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

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### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

##### · Form:

Solid

##### · Colour:

According to product specification

##### · Odour:

Characteristic

##### · pH-value at 20 °C:

4.31

##### · Change in condition

##### · Melting point/freezing point:

Undetermined.

##### · Initial boiling point and boiling range:

Not applicable

##### · Flash point:

Not applicable.

##### · Auto-ignition temperature:

Product is not selfigniting.

##### · Explosive properties:

Product does not present an explosion hazard.

##### · Density:

Not determined.

##### · Solubility in / Miscibility with

##### · water:

Dispersible.

#### · 9.2 Other information

No further relevant information available.

### SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

#### · 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions No dangerous reactions known.

· 10.4 Conditions to avoid No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### SECTION 11: Toxicological information

#### · 11.1 Information on toxicological effects

##### · Acute toxicity

Fatal if swallowed or if inhaled.

##### · LD/LC50 values relevant for classification:

Oral	LD50	<50 mg/kg (rat)
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Dermal	LD50	>4000 mg/kg (rat)
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##### CAS: 12125-02-9 ammonium chloride

Oral	LD50	1650 mg/kg (rat)
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##### · Primary irritant effect:

· Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation Based on available data, the classification criteria are not met.

##### · Respiratory or skin sensitisation

May cause an allergic skin reaction.

##### · CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

· Germ cell mutagenicity Based on available data, the classification criteria are not met.

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- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:**
    - Fish: 96h-LC50 =7.3 mg/L (Rainbow trout)
    - Aquatic Invertebrates: 48h - EC50=0.0046 mg/l (Daphnia Magna)
    - Algae: 72h-ErC50=5.1 mg/L (Pseudokirchneriella subcapitata)
- **12.2 Persistence and degradability** Not readily biodegradable
- **12.3 Bioaccumulative potential** it is not bioaccumulable
- **12.4 Mobility in soil** No further relevant information available.
  - **Ecotoxicological effects:**
    - **Remark:** Very toxic for fish
  - **Additional ecological information:**
    - **General notes:**
      - Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
      - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
      - Danger to drinking water if even extremely small quantities leak into the ground.
      - Also poisonous for fish and plankton in water bodies.
      - Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- **14.1 UN-Number**
  - **ADR, IMDG, IATA** 2757
- **14.2 UN proper shipping name**
  - **ADR** 2757 CARBAMATE PESTICIDE, SOLID, TOXIC (formetanate hydrochloride)
  - **IMDG, IATA** CARBAMATE PESTICIDE, SOLID, TOXIC (formetanate hydrochloride)

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**· 14.3 Transport hazard class(es)****· ADR, IMDG**

**· Class** 6.1 Toxic substances.  
**· Label** 6.1

**· IATA**

**· Class** 6.1 Toxic substances.  
**· Label** 6.1

**· 14.4 Packing group****· ADR, IMDG, IATA** II**· 14.5 Environmental hazards:***Product contains environmentally hazardous substances: formetanate hydrochloride*

**· Marine pollutant:** Yes  
Symbol (fish and tree)

**· Special marking (ADR):** Symbol (fish and tree)

**· 14.6 Special precautions for user**

Warning: Toxic substances.

**· Danger code (Kemler):** 60  
**· EMS Number:** F-A,S-A

**· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

**· Transport/Additional information:****· ADR**

**· Excepted quantities (EQ):** E4  
**· Limited quantities (LQ)** LQ18  
**· Transport category** 2  
**· Tunnel restriction code** D/E

**· UN "Model Regulation":** UN2757, CARBAMATE PESTICIDE, SOLID, TOXIC, 6.1, II**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 65  
**· 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

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· **Relevant phrases**

- H300 Fatal if swallowed.
- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Supply Chain· **Contact:** sds@gowanco.com· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· **Sources** Dicarzol® is a registered trademark of Gowan Crop Protection Limited· \* **Data compared to the previous version altered.**