

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

· 1.1 Product identifier

· **Trade name:** **CARZOL® SP INSTAPAK®**

· **CAS Number:** Formetanate hydrochloride (92.0%): 23422-53-9

· **Registration number** PCP Registration No.: 29991

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

· **Sector of Use** Agriculture

· **Application of the substance / the mixture** Group 1A Insecticide

· 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(928) 783-8844

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

· 1.4 Emergency telephone number:

Chemtrec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300

Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (Prosar®): (888) 478-0798

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

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

The product is not classified according to the CLP regulation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.

· **Additional information:**

Physical Properties

Appearance: White crystals

Odour: Odourless

Symptoms of Acute Exposure

Fatal if swallowed. Can cause irreversible eye damage. Overexposure to formetanate hydrochloride produces symptoms associated with cholinesterase inhibition. The symptoms of cholinesterase inhibition are nausea, vomiting, dizziness, tremors, salivation and constricted pupils.

Medical Conditions Likely to be Aggravated by Exposure

No specific conditions are known; may aggravate pre-existing conditions of eyes and the respiratory system.

· 2.2 Label elements

RESTRICTED

DANGER / POISON

KEEP OUT OF REACH OF CHILDREN

· **Labelling according to EU guidelines:**

· **Hazard-determining components of labelling:**

formetanate hydrochloride

· 2.3 Other hazards

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

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SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

· **Dangerous components:**

23422-53-9	formetanate hydrochloride	92.0%
	 T+ R26/28;  Xi R43;  N R50/53  Acute Tox. 2, H300;  Acute Tox. 2, H330;  Skin Sens. 1, H317	

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

You may also contact 1-888-478-0798 for emergency medical treatment information.

· **After inhalation:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call poison control center or doctor for further treatment advice.

· **After skin contact:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

· **After eye contact:**

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
- Call a poison control center or doctor for treatment advice.

· **After swallowing:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

· **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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

Hydrogen chloride (HCl)

Nitrogen oxides (NO_x)

· 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

· **Additional information** Dispersion of fine dust in the air may form an explosion mixture.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Water-soluble bags (WSB) are contained in a protective pouch. Do not open WSB or allow WSB to become wet prior to adding to the spray tank. This product is poisonous if swallowed. Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. Do not contaminate food and feed. Wear protective clothing and equipment when handling this material. Wash before eating, smoking or drinking. Wash contaminated clothing before reuse. This product is poisonous to birds and other wildlife. Do not contaminate ponds, lakes or streams by cleaning of equipment, or disposal of wastes. Do not apply when the prevailing wind direction will cause drift from treated areas into lakes, ponds, and other waterways. Do not apply to areas with a potential for runoff to aquatic systems. Do not apply to coarse textured soils, to prevent leaching to groundwater.

· 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up: Pick up mechanically.

· 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

Water-soluble bags (WSB) are contained in a protective pouch. Do not open WSB or allow WSB to become wet prior to adding to the spray tank. This product is poisonous if swallowed. Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. Do not contaminate food and feed. Wear protective clothing and equipment when handling this material. Wash before eating, smoking or drinking. Wash contaminated clothing before reuse.

· **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.

· 7.2 Conditions for safe storage, including any incompatibilities

Do not subject to temperatures below 0 °C. At temperatures below 0 °C, soluble film packaging becomes susceptible to cracking and breakage. Store in a cool, dry place. Do not store at temperatures above 40 °C.

· 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:** Store in a cool, dry place.

· 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.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wear protective clothing and equipment when handling this material. Wash before eating, smoking or drinking. Wash contaminated clothing before reuse. This product is poisonous to birds and other wildlife. Do not contaminate ponds, lakes or streams by cleaning of equipment, or disposal of wastes. Do not apply when the prevailing wind direction will cause drift from treated areas into lakes, ponds, and other waterways. Do not apply to areas with a potential for runoff to aquatic systems. Do not apply to coarse

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textured soils, to prevent leaching to groundwater. Do not apply when rain is forecast. This product is poisonous to bees; avoid its use where bees are active. Time applications to coincide with periods of minimum bee activity. Do not allow livestock to graze in areas treated with CARZOL SP Instapak.

- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

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

- **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:**

During application wear long-sleeved shirt, long pants and chemical resistant gloves. Keep the following personal protective equipment immediately available for use in case of emergency (i.e. a broken package, spill or equipment breakdown): chemical-resistant coveralls, chemical-resistant gloves, chemical-resistant headgear and a respirator.

If a closed cab is not used, wear long pants, long-sleeved shirt, shoes plus socks, chemical-resistant gloves, chemical-resistant headgear and chemical-resistant coveralls and NIOSH approved respiratory protection. Chemical-resistant headgear includes So'westers or large brimmed waterproof hats and hoods with sufficient neck protection. Avoid touching face or other unprotected parts of the body during application.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Crystals
- **Colour:** White
- **Odour:** Odourless
- **Odour threshold:** Not determined.

- **Change in condition**

- **Melting point/Melting range:** 190-202 °C (374-396 °F)

- **Flash point:**

Not applicable.

- **Flammability (solid, gaseous):**

Not determined.

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· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density at 20 °C (68 °F):	0.3 g/cm ³ (2.504 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· water:	Dispersible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability** Stable under normal conditions
 - **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:**
 - Hydrogen chloride (HCl)
 - Nitrogen oxides

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:**

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

Oral	LD50	15-26 mg/kg (rat)
Dermal	LD50	>5600 mg/kg (rat)
Inhalative	LC50/4 h	0.15 mg/l (rat)

- **Primary irritant effect:**
 - **on the skin:** May be irritating to the skin
 - **on the eye:** Irritating effect.

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· **Sensitisation:** Sensitisation possible through skin contact.

SECTION 12: Ecological information

· **12.1 Toxicity**

- **TOXIC to aquatic organisms.** Observe buffer zones specified under **DIRECTIONS FOR USE.**
- **TOXIC to birds.**
- **TOXIC to small wild animals.**
- **TOXIC to certain beneficial insects.** Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site, such as hedgerows and woodlands.

· **Aquatic toxicity:**

- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).
 - Avoid application of this product when heavy rain is forecast.
 - Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- **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**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

· **Uncleaned packaging:**

· **Recommendation:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

SECTION 14: Transport information

· **14.1 UN-Number**

· **DOT, TDG, IMDG, IATA**

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· **14.2 UN proper shipping name**
 · **DOT, TDG** 2757 CARBAMATE PESTICIDE, SOLID, TOXIC (formetanate hydrochloride)
 · **IMDG** CARBAMATE PESTICIDE, SOLID, TOXIC (formetanate hydrochloride), MARINE POLLUTANT
 · **IATA** CARBAMATE PESTICIDE, SOLID, TOXIC (formetanate hydrochloride)

· **14.3 Transport hazard class(es)**· **14.3 DOT, TDG, IATA**

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

· **IMDG**

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

· **14.4 Packing group**· **DOT, TDG, IMDG, IATA** II· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: formetanate hydrochloride

· **Marine pollutant:**Yes
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 MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT, TDG**· **Limited quantities (LQ)**

500 g

· **Excepted quantities (EQ)**

Code: E4

Maximum net quantity per inner packaging: 1 g

Maximum net quantity per outer packaging: 500 g

· **Transport category**

2

· **Tunnel restriction code**

D/E

· **IMDG**· **Limited quantities (LQ)**

500 g

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· **Excepted quantities (EQ)**

Code: E4

Maximum net quantity per inner packaging: 1 g

Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":**

UN2757, CARBAMATE PESTICIDE, SOLID, TOXIC
(formetanate hydrochloride), 6.1, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **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.

· **Relevant phrases**

H300 Fatal if swallowed.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

R26/28 Very toxic by inhalation and if swallowed.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS:** Supply Chain

· **Contact:** sds@gowanco.com

· **Abbreviations and acronyms:**

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)

Acute Tox. 2: Acute toxicity, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· **Sources**

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