SAFETY DATA SHEET

Revision date: 30-Apr-2018

Revision Number 3

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name CARBOMINE COMPONENT A

Product Code(s) 000000050412

Other means of identification

Synonyms Carbomine Inject Komp. A; Carbomine (Component A).

Recommended use of the chemical and restrictions on use

Recommended use No information available.

Uses advised against No information available.

Emergency telephone number

Emergency telephone number No information available.

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Label elements

Hazard statements

Other hazards which do not result in classification

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Non hazardous component(s)	-	to 100%
Phenol	108-95-2	<1%
Potassium hydroxide	1310-58-3	10-30%
Formaldehyde	50-00-0	<0.1%

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

No information available.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Chemical name	Australia	ACGIH TLV
Formaldehyde	1 ppm	STEL: 0.3 ppm
50-00-0	1.2 mg/m ³	TWA: 0.1 ppm
	2 ppm STEL	
	2.5 mg/m ³ STEL	

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to

determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateNo information available.AppearanceNo information available.ColorNo information available.OdorNo information available.Odor thresholdNo information available.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Hq No data available None known pH (as aqueous solution) No data available None known No data available Melting point / freezing point None known No data available None known Boiling point / boiling range None known Flash point No data available **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

No data available

Upper flammability or explosive

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available None known No data available Vapor density None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known No data available **Partition coefficient** None known No data available **Autoignition temperature** None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoidNone known based on information supplied.

Incompatible materials

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms No information available.

Numerical measures of toxicity - Product Information

No information available.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol	= 340 mg/kg (Rat) = 317 mg/kg (Rat)	= 630 mg/kg (Rabbit)	= 316 mg/m ³ (Rat) 4 h
Potassium hydroxide	= 284 mg/kg (Rat)	•	-
Formaldehyde	= 100 mg/kg (Rat)	= 270 mg/kg (Rabbit)	= 0.578 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical name	Australia
Formaldehyde - 50-00-0	Carc. 1B

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phenol	EC50: =46.42mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.0188 - 0.1044mg/L (96h, Pseudokirchneriella subcapitata) EC50: 187 - 279mg/L (72h, Desmodesmus subspicatus)	LC50: 11.9 - 50.5mg/L (96h, Pimephales promelas) LC50: 20.5 - 25.6mg/L (96h, Pimephales promelas) LC50: =32mg/L (96h, Pimephales promelas) LC50: 5.449 - 6.789mg/L (96h, Oncorhynchus mykiss) LC50: 7.5 - 14mg/L (96h, Oncorhynchus mykiss) LC50: 4.23 - 7.49mg/L (96h, Oncorhynchus mykiss) LC50: =27.8mg/L (96h, Brachydanio rerio) LC50: =0.00175mg/L (96h, Cyprinus carpio) LC50: 33.9 - 43.3mg/L (96h, Oryzias latipes) LC50: 23.4 - 36.6mg/L (96h, Oryzias latipes) LC50: 5.0 - 12.0mg/L (96h, Oncorhynchus mykiss) LC50: =13.5mg/L (96h, Lepomis macrochirus) LC50: 11.9 - 25.3mg/L (96h, Lepomis macrochirus) LC50: 34.09 - 47.64mg/L (96h, Poecilia reticulata) LC50: =31mg/L (96h, Poecilia reticulata)	-	EC50: 4.24 - 10.7mg/L (48h, Daphnia magna) EC50: 10.2 - 15.5mg/L (48h, Daphnia magna)
Potassium hydroxide	-	LC50: =80mg/L (96h, Gambusia affinis)	-	-
Formaldehyde	-	LC50: 22.6 - 25.7mg/L (96h, Pimephales promelas) LC50: =1510µg/L (96h, Lepomis macrochirus) LC50: =41mg/L (96h, Brachydanio rerio) LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss) LC50: 100 - 136mg/L (96h, Oncorhynchus mykiss) LC50: 23.2 - 29.7mg/L (96h, Pimephales promelas)	-	LC50: =2mg/L (48h, Daphnia magna) EC50: 11.3 - 18mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Chemical name	Partition coefficient
Phenol	1.5
Potassium hydroxide	0.83
Formaldehyde	0.35

Mobility

Mobility in soil No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

14. TRANSPORT INFORMATION

ADG

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

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

National regulations

Australia

See section 8 for national exposure control parameters

Chemical name	Threshold quantity (T)
Formaldehyde - 50-00-0	50 tonne TQ >90%
Chemical name	National pollutant inventory
Phenol - 108-95-2	10 tonne/yr Threshold category 1
Formaldehyde - 50-00-0	10 tonne/yr Threshold category 1

International Inventories

AIIC Contact supplier for inventory compliance status.

Legend:

AIIC- Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their lxom representative or lxom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of

which is available upon request.

End of Safety Data Sheet