HURST SCIENTIFIC

Safety Data Sheet
Bouins 2000

SECTION 1: Identification

GHS Product identifier

Product name	Bouins 2000
Product number	FXBOU2PT
Brand	American Mastertech

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2 Transit Place 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a Hazardous substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as a **Non Dangerous** goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 8

- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, inhalation, Cat. 5
- Acute toxicity, oral, Cat. 4
- Carcinogenicity, Cat. 1B
- Germ cell mutagenicity, Cat. 2

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B
- Sensitization - skin, Cat. 1
- Specific target organ toxicity, repeated exposure, Cat. 2

GHS label elements, including precautionary statements

Pictograms

1. Exclamation mark; 2. Health hazard; 3. Corrosion

Signal word	**Danger**

Hazard statement(s)

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H333	May be harmful if inhaled
H341	Suspected of causing genetic defects [route]
H350	May cause cancer [route]
H373	May cause damage to organs [organs] through prolonged or repeated exposure [route]

Precautionary statement(s)

P203	Obtain, read and follow all safety instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash … thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P316	Get emergency help immediately.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P316	IF exposed or concerned: Get emergency medical help immediately.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. GLYOXAL

Concentration	10 - 25 % (volume)
CAS no.	107-22-2

2. Ethanol

Concentration	2.5 - 10 %
CAS no.	64-17-5

3. Ethylene glycol

Concentration	2.5 - 10 % (volume)
CAS no.	107-21-1

4. Zinc chloride

Concentration	1 - 2.5 % (volume)
CAS no.	7646-85-7

5. FORMALDEHYDE, 37% SOLUTION

Concentration	1 - 2.5 % (volume)
CAS no.	50-00-0

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases, do not use mouth-mouth method. Seek immediate medical attention.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. Seek medical attention.
In case of eye contact	Flush eyes with copious amounts of water for at least 15 minutes. Seek immediate medical attention.
If swallowed	DO NOT induce vomiting. Rinse mouth out with water to remove the product. Seek immediate medical attention.

Personal protective equipment for first-aid responders

First aid facilities Eye wash station, safety shower and First Aid kit.
Advice to Doctor Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Carbon Dioxide, Dry chemical, foam or water spray.

Specific hazards arising from the chemical
Toxic gases may evolve.

Special protective actions for fire-fighters
Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment. Use water spray to cool fire-exposed surfaces and to protect personnel. Be aware vapours may travel.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Eliminate all sources of ignition and take measures to prevent static discharge. Wear appropriate protective clothing. Ensure adequate ventilation. If possible, contain the spill. Evacuate all unnecessary personnel.

Methods and materials for containment and cleaning up
Absorb with vermiculite or similar and place into a suitably labelled container. Dispose of waste according to local authority guidelines. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

Precautions for safe handling
Use only in an adequately ventilated area away from all sources of ignition. Avoid breathing in mists or vapours. Wear appropriate protective clothing to avoid any exposure and practice good personal hygiene.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area away from incompatibles and out of direct sunlight. Keep containers tightly closed when not in use and protected against physical damage.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 107-21-1
Ethylene glycol
AU/SWA (Australia): 40 ppm; 104 mg/m3 STEL inhalation; 10 mg/m3 TWA inhalation; 20 ppm; 52 mg/m3 TWA inhalation

CAS: 50-00-0
FORMALDEHYDE, 37% SOLUTION
AU/SWA (Australia): 2 ppm; 2.5 mg/m3 STEL inhalation; 1 ppm; 1.2 mg/m3 TWA inhalation

CAS: 64-17-5
Ethanol
AU/SWA (Australia): 1000 ppm; 1880 mg/m3 TWA inhalation

CAS: 7646-85-7
Zinc chloride
AU/SWA (Australia): 2 mg/m3 STEL inhalation; 1 mg/m3 TWA inhalation

Appropriate engineering controls
Ensure adequate ventilation to maintain airborne concentrations below national exposure standards.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Safety glasses or goggles with side-shields.

Skin protection
Chemical-resistant gloves and laboratory coat.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Yellow
Odor	Pungent
Odor threshold	Not determined.
Melting point/freezing point	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.

Lower and upper explosion limit/flammability limit	Not determined.
Flash point	Not applicable
Auto-ignition temperature	425 °C
Decomposition temperature	Not determined.
pH	5 @ 20°C
Kinematic viscosity	Not determined.
Solubility	Fully miscible
Vapor pressure	@ 20°C 23 hPa (17.3 mm Hg)
Evaporation rate	Not determined.
Density and/or relative density	Not determined.
Relative vapor density	Not determined.

SECTION 10: Stability and reactivity

Reactivity
Non-reactive under recommended conditions for use and storage.

Chemical stability
Stable under recommended conditions for use and storage.

Possibility of hazardous reactions
Polymerisation will not occur.

Conditions to avoid
Avoid excessive heat, ignition, direct sunlight and incompatibles.

Incompatible materials
Oxidising agents, strong acids and bases.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Eye Contact Exposure may result in irritation, lacrimation, pain and redness. Direct contact may also result in corneal burns and damage.
Skin Contact May cause irritation resulting in rash, pain and itching. Can also cause sensitisation and burns.
Inhalation May cause irritation to the mucous membranes of the upper respiratory tract resulting in coughing, chest pain and breathing difficulties.
Ingestion May cause irritation of the gastrointestinal system resulting in nausea, vomiting, abdominal pain and diarrhoea.

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitization
May cause an allergic skin reaction.

Germ cell mutagenicity
No classification.

Carcinogenicity
Formaldehyde: Group 1: The agent (mixture) is carcinogenic to humans. The exposure circumstance entails exposures that are carcinogenic to humans. This category is used when there is sufficient evidence of carcinogenicity in humans.

Reproductive toxicity
No classification.

Specific target organ toxicity (STOT) - single exposure
May cause respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure
No classification.

Aspiration hazard
No classification.

Additional information
TOXICITY DATA:LD/LC50 values that are relevant for classification:
107-22-2 glyoxal
Oral LD50 7,070 mg/kg (rat)
Dermal LD50 10,000 mg/kg (rabbit)
7646-85-7 zinc chloride
Oral LD50 350 mg/kg (rat)
50-00-0 formaldehyde
Oral LD50 >200 mg/kg (rat)
Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.
On the eye: Irritating effect.
Sensitization: Sensitization possible through skin contact.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
Carcinogenic categories
IARC (International Agency for Research on Cancer)
64-17-5 ethanol 1
50-00-0 formaldehyde 1
NTP (National Toxicology Program)
50-00-0 formaldehyde K
OSHA-Ca (Occupational Safety & Health Administration)
50-00-0 formaldehyde

SECTION 12: Ecological information

Toxicity
May have adverse effects on the aquatic environment.

Persistence and degradability
Not available for this mixture.

Bioaccumulative potential
Not available for this mixture.

Mobility in soil
Not available for this mixture.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of in accordance with local authority guidelines.

SECTION 14: Transport information

UN Number	None
UN Proper Shipping Name	None
Transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None
Transport in bulk according to IMO instruments	None

SECTION 15: Regulatory information

Chemical Safety Assessment

• TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day week.

• STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute period, which should not be exceeded at any time during a normal eight-hour workday.

SECTION 16: Other information

Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Preparation information

References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).