Safety Data Sheet Confix Neutral Bufffered Formalin Concentrate

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SECTION 1: Identification

GHS Product identifier

Product name	Confix Neutral Bufffered Formalin Concentrate

Recommended use of the chemical and restrictions on use

In vitro diagnostic reagent, intended for the preservation of samples for later morphological studies and/or diagnostic protocols.

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

National contact

Name	Australian Biostains Pty Ltd
Address	16 Shipwright Road 5016 Largs North SA Australia

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, inhalation, Cat. 2
- Acute toxicity, dermal, Cat. 3
- Acute toxicity, oral, Cat. 4

- Carcinogenicity, Cat. 1
- Serious eye damage/eye irritation, Cat. 1
- Germ cell mutagenicity, Cat. 2
- Skin corrosion/irritation, Cat. 1B
- Skin sensitizer, Cat. 1

GHS label elements, including precautionary statements

Pictograms

Signal word **Danger**

Hazard statement(s)

H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H330	Fatal if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physcian if you feel unwell,
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P310	Immediately call a POISON CENTER/doctor/physcian
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use agents recommended in Section 5 of SDS for extinction
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 30.03

Information on ingredients:
Contains minor amounts of:;
Edicol Blue - Blue;;
Bromothymol Blue - Green;;
Bromocresyl Purple - Purple;;
Phenol Red - Red;;

for colouring.

Stabilised with methanol. Contains various salts as buffering agents.

Other components either not classified as Hazardous under the GHS, or below cut-off concentrations to be classified as Hazardous.

Components

Component	CAS no.	Concentration
FORMALDEHYDE, 37% SOLUTION (EC no.: 200-001-8; Index no.: 605-001-00-5)	**50-00-0**	**15 - < 25 % (weight)**
CLASSIFICATIONS: Germ cell mutagenicity, Cat. 2; Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 3; Skin corrosion/irritation, Cat. 1B; Skin sensitizer, Cat. 1; Acute toxicity, inhalation, Cat. 2; Carcinogenicity, Cat. 1. HAZARDS: H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction; H330 - Fatal if inhaled; H341 - Suspected of causing genetic defects [route]; H350 - May cause cancer [route]. [SCLs/M-factors/ATEs]: STOT SE 3; H335: C ≥ 5 %; Skin Corr. 1B; H314: C ≥ 25 %; Skin Irrit. 2; H315: 5 % ≤ C < 25 %; Eye Irrit. 2; H319: 5 % ≤ C < 25 %; Skin Sens. 1; H317: C ≥ 0,2 %		
Methanol (EC no.: 200-659-6; Index no.: 603-001-00-X)	**67-56-1**	**5 - 7 % (weight)**
CLASSIFICATIONS: Flammable liquids, Cat. 2; Acute toxicity, inhalation, Cat. 3; Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 3; Specific target organ toxicity following single exposure, Cat. 1. HAZARDS: H225 - Highly flammable liquid and vapor; H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H331 - Toxic if inhaled; H370 - Causes damage to organs [organs, route]. [SCLs/M-factors/ATEs]: *; STOT SE 1; H370: C ≥ 10 %; STOT SE 2; H371: 3 % ≤ C < 10 %		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
In case of skin contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
In case of eye contact	If in eyes, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.
If swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary
For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

*SYMPTOMS:
Symptoms of exposure to this compound may include headache, fatigue, nausea, dizziness, stupor, cramps, dermatitis, visual impairment or complete blindness (may be permanent); acidosis, convulsions, mydriasis, circulatory collapse, respiratory failure, death, irritation of mucous membranes, damage to the central nervous system (especially the optic nerve), injury to the kidneys, liver, heart and other organs; peripheral neuritis, gastrointestinal disturbances, photophobia and conjuctivitis, followed by definite eye lesions; narcosis, unconsciousness, shallow breathing, cyanosis, coma, fall in blood pressure, hyperemia of the optic disk with blurring of the margin; burning

sensation, coughing, wheezing, laryngitis, vomiting, delirium, pain in the eyes, giddiness, vertigo, severe abdominal pain, back pain, dyspnea, motor restlessness, cold clammy extremities and diarrhea.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Small fire: Use foam, dry chemical, CO2 or water spray.
Large fire: Use foam, fog or water spray. Do not use water jets.
If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out.
Avoid getting water inside containers.
Alcohol resistant foam is preferred however fine water spray can be used.

Specific hazards arising from the chemical
May liberate toxic fumes in fire including formic acid, methanol, carbon monoxide and carbon dioxide.

Special protective actions for fire-fighters
Wear SCBA, fully-encapsulating, gas-tight suit and structural firefighting uniform when handling leaking or damaged containers and equipment. SCBA and chemical splash suits will offer limited protection for brief exposure provided there is no risk of ignition.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of in accordance with local and national regulations. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling
Avoid inhalation of vapour or mist. For precautions see section 2.2.

Avoid ingestion and inhalation of vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Keep containers closed when not in use. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wear suitable protective clothing. Under no circumstances eat, drink or smoke while handling this material. Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

SECTION 8: Exposure controls/personal protection

Control parameters

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: 67-56-1
Methanol
AU/SWA (Australia): 250 ppm; 328 mg/m3 STEL inhalation; 200 ppm; 262 mg/m3 TWA inhalation

Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.f the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

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

Eye/face protection
The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection
Clean impervious clothing should be worn. Clothing for protection against
chemicals should comply with AS 3765 Clothing for Protection Against Hazardous
Chemicals.

Hand Protection: Normally not required but if in doubt ensure hand protection should complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	No data available.
Odor	Pungent, suffocating odour.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	Combustible liquid.
Lower and upper explosion limit/flammability limit	Flammable Limits - Lower: 7% Upper: 70%
Flash point	65 °C
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	7
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Completely miscible.
Partition coefficient n-octanol/water (log value)	Log P(oct) = 0.35 (experimental) (formaldehyde).
Vapor pressure	No data available.
Evaporation rate	No data available.

Density and/or relative density	1.1
Relative vapor density	1.0
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes
No data available.

Further safety characteristics (supplemental)
No data available.

SECTION 10: Stability and reactivity

Reactivity
Stable under normal conditions of storage and handling.

Chemical stability
Stable under recommended storage conditions.

May form paraformaldehyde on prolonged storage or if stored outside recommended temperatures/conditions

Possibility of hazardous reactions
None under normal use conditions.

Conditions to avoid
Open flames, heat, hot surfaces, sparks and other ignition sources.

Incompatible materials
Strong oxidizing agents, strong acids, strong bases, alkali metals.

Hazardous decomposition products
Formic acid, methanol, carbon monoxide and carbon dioxide.

Water: In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Acute Toxicity - Oral: LD50 (rat): >200 mg/kg (Formaldehyde).

Ingestion: Harmful if swallowed. Ingestion may cause irritation of the mouth, throat and stomach resulting in nausea. In extreme cases swallowing can result in vomiting, diarrhoea, abdominal pain, convulsions, chemical burns, loss of consciousness, collapse and possible death. Risk of perforation in the oesophagus and stomach. Systemic effects: narcosis and blindness.

Inhalation: Harmful if inhaled. Inhalation may lead to the formation of oedemas in the respiratory tract. Vapour is irritating to mucous membranes and the respiratory tract. Inhalation can result in headache, dizziness and possible nausea.

// ----- From the Suggestion report (27/07/2023, 9:06 AM) ----- //
The ATE (dermal) of the mixture is: 937.5 mg/kg bw

// ----- From the Suggestion report (27/07/2023, 9:06 AM) ----- //

The ATE (gas inhalation) of the mixture is: 384.62 ppmV

// ----- From the Suggestion report (27/07/2023, 9:06 AM) ----- //
The ATE (oral) of the mixture is: 312.5 mg/kg bw

Skin corrosion/irritation
May cause on allergic skin reaction. Repeated or prolonged skin contact may lead to allergic contact dermatitis. A skin sensitiser.

Serious eye damage/irritation
May be an irritant to the eye.

Respiratory or skin sensitization
Formaldehyde: Known to act as a sensitiser.

Germ cell mutagenicity
Formaldehyde [50-00-0]: DNA damage system-human: fibroblast 100 mmol/l.

Carcinogenicity
H350 May cause cancer.

Formaldehyde [50-00-0] is evaluated in the IARC Monographs (Vol. 88; in preparation) as Group 1: Carcinogenic to humans.
For addition information see IARC publication: http://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-29.pdf

Reproductive toxicity
Formaldehyde [resp], human: one study suggests a slight percentage increase in spontaneous abortion and subtle neurobehavioral abnormalities, animal-decreased sperm motility, reduced fetal and maternal weight.

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
May cause damage to Kidney, Liver and Spleen on repeated exposure

Aspiration hazard
No data available.

Additional information
Chronic Effects: Repeated or prolonged skin contact may cause chronic dermatitis. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

FORMALDEHYDE, 37% SOLUTION: *TOXICITY:
typ. dose mode specie amount units other
LDLo orl wmn 108 mg/kg
TCLo ihl hmn 17 mg/m3/30M
TCLo ihl man 300 ug/m3
LDLo unr man 477 mg/kg
LD50 orl rat 800 mg/kg
LC50 ihl rat 590 mg/m3
LC50 ihl mam 92 mg/m3
LD50 scu rat 420 mg/kg
LD50 ivn rat 87 mg/kg
LDLo ipr mus 16 mg/kg
LD50 scu mus 300 mg/kg
LD50 orl mus 42 mg/kg

LDLo scu dog 595 mg/kg
LCLo ihl cat 400 mg/m3/2H
LD50 skn rbt 270 mg/kg
LDLo scu rbt 240 mg/kg
LD50 orl gpg 260 mg/kg
LC50 ihl mus 400 mg/m3/2H
LDLo ivn cat 30 mg/kg
LDLo ivn rbt 48 mg/kg

*AQTX/TLM96: 100-10 ppm [042]

*SAX TOXICITY EVALUATION:
THR: Human poison by ingestion. Experimental poison by ingestion, skin contact, inhalation, intravenous, intraperitoneal and subcutaneous routes. A suspected human carcinogen. An experimental carcinogen, tumorigen and teratogen. Human systemic effects by inhalation. Experimental reproductive effects. Human mutagenic data. A human skin and eye irritant. A severe experimental eye and skin irritant. An air concentration of 20 ppm is quickly irritating to eyes. A common air contaminant. The gas is a more dangerous fire hazard than the vapor.

*CARCINOGENICITY:
Tumorigenic Data:
TDLo: scu-rat 1170 mg/kg/65W-I
TD : scu-rat 350 mg/kg/78W-I
TC : ihl-rat 15 ppm/6H/78W-I
TCLo: ihl-mus 14300 ppb/6H/2Y-I
TC : ihl-rat 6 ppm/6H/2Y-I
TCLo: ihl-rat 14300 ppb/6H/2Y-I
TC : ihl-rat 15 ppm/6H/86W-I
TC : ihl-rat 14 ppm/6H/84W-I
TC : ihl-rat 18750 ug/m3/2Y-I
TC : ihl-mus 15 ppm/6H/104W-I
TC : ihl-rat 15 ppm/6H/2Y-I
TC : ihl-rat 5600 ppb/6H/2Y-I
TC : ihl-rat 14300 ppb/6H/2Y-I
Review: IARC Cancer Review: Animal Sufficient Evidence
IARC Cancer Review: Human Limited Evidence
IARC probable human carcinogen (Group 2A) [015,610]
EPA Carcinogen Assessment Group [610]
ACGIH suspected human carcinogen [015,415,421]
OSHA cancer suspect agent [610]
Status: NTP Fourth Annual Report on Carcinogens, 1984

*MUTATION DATA:
test lowest dose | test lowest dose
---------- ---------- | ---------- ----------
mmo-sat 100 umol/L | mmo-omi 250 ppm
mmo-esc 100 ppm/3H | mmo-omi 1 pph/15M
mmo-srm 5 gm/L | sln-dmg-unr 10 pph/3H-C
dnr-esc 1950 ug/L | oms-rat:oth 100 umol/L
dnd-esc 5 ppm | sln-dmg-orl 250 ppm
mmo-omi 1 pph/5M-C | sln-dmg-par 2000 ppm
mmo-omi 10 ppm | dlt-dmg-orl 1300 ppm
mmo-omi 200 ppm | mmo-nsc 10 mmol/plate

mmo-omi 1000 ppm | mrc-smc 24 mmol/L
sln-asn 20 mg/L | slt-nml-unr 700 ppm
oms-nml:oth 40 mmol/L | oms-nml:oth 25 mmol/L
cyt-nml:oth 40 mmol/L | cyt-grh:oth 750 umol/L
dnd-hmn:fbr 100 umol/L | dnd-hmn:lng 100 umol/L
dnd-hmn:oth 100 umol/L | dns-hmn:hla 10 nmol/L
oms-hmn:lym 10 mg/L | dnd-rat-ihl 35 ug/m3/8W-I
cyt-hmn:lym 10 mg/L | cyt-hmn:fbr 2 mmol/L
sce-hmn:lym 125 umol/L | msc-hmn:lym 130 umol/L
dnd-rat-orl 10 umol/kg | mmo-omi 200 umol/L
cyt-rat-ihl 15 ppm/5D-I | otr-mus:emb 1 mg/L
dnd-mus:leu 125 umol/L | cyt-mus-orl 100 mg/kg
cyt-mus-ipr 15 mg/kg | otr-ham:kdy 4 mg/L
pic-ham:emb 3 uL/L | cyt-ham:lng 18 mg/L
cyt-ham:ovr 200 ug/L | sce-ham:ovr 110 ug/L
dnd-ckn:leu 500 ppm | dnd-mam:lym 500 ppm
dnd-mam:lym 660 mmol/L | mma-sat 100 umol/L
dnd-rat:oth 500 umol/L | dni-esc 5 mmol/L
dni-hmn:oth 210 umol/L | dni-rat:oth 100 umol/L
oms-hmn:oth 210 umol/L | dns-rat:oth 50 umol/L
msc-mus:lym 74 mg/L | mma-mus:lym 25 mg/L
sln-dmg:ihl 7 pph/24H | sce-ham:lng 67 umol/L
spm-rat-orl 200 mg/kg | otr-nml:oth 25 mmol/L
otr-nml:oth 25 mmol/L | spm-dom-itt 23 mg/kg

*TERATOGENICITY:
Reproductive Effects Data:
TCLo: ihl-rat 12 ug/m3/24H (15D pre/1-22D preg)
TCLo: ihl-rat 12 ug/m3/24H (1-22D preg)
TCLo: ihl-rat 35 ug/m3/8H (60D male)
TCLo: ihl-rat 1 mg/m3/24H (1-22D preg)
TDLo: ims-mus 259 mg/kg (11D preg)
TDLo: orl-rat 200 mg/kg (1D male)
TCLo: ihl-rat 12 ug/m3/24H (20D pre/1-22D preg)
TCLo: ihl-rat 50 ug/m3/4H (1-19D preg)
TDLo: scu-rat 46243 mg/kg (20D male)
TDLo: itt-rat 400 mg/kg (1D male)
TDLo: ipr-mus 240 mg/kg (7-14D preg)
TDLo: ipr-mus 160 mg/kg (7-14D preg)
TDLo: itt-dog 7 mg/kg (1D male)
TDLo: itt-mky 4 mg/kg (1D male)
TDLo: itt-dom 6667 ug/kg (1D male)
TDLo: ipr-mus 500 mg/kg (5D male)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z
Transitional Limit: PEL-TWA 3 ppm; Ceiling Limit 5 ppm; Peak 10 ppm/30M [610]
Final Limit: PEL-TWA 1 ppm; STEL 2 ppm [610]
Action level TWA 0.5 ppm [610]
OSHA irritant and potential cancer hazard [610]
ACGIH: TLV-TWA 1 ppm, STEL 2 ppm, with a notice of intent to change to a Ceiling Limit of 0.3 pppm [610]
NIOSH Criteria Document: Recommended Exposure Limit to this compound-air: Ceiling Limit 0.1 ppm/15M [610]

NFPA Hazard Rating: Health (H): 2
Flammability (F): 4
Reactivity (R): 0
H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides eye protection (see NFPA for details).
F4: Very flammable gases or very volatile flammable liquids (see NFPA for details).
R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:
Skin and Eye Irritation Data:
skn-hmn 150 ug/3D-I MLD
eye-hmn 4 ppm/5M
eye-hmn 1 ppm/6M nse MLD
skn-rbt 540 mg open MLD
skn-rbt 50 mg/24H MOD
eye-rbt 750 ug SEV
skn-rbt 2 mg/24H SEV
eye-rbt 750 ug/24H SEV
eye-rbt 10 mg SEV
Review: Toxicology Review-3
Standards and Regulations: DOT-Hazard: ORM-A; Label: None
DOT-Hazard: Combustible liquid; Label: None
DOT-IMO: Flammable or Combustible liquid;
Label: Flammable liquid
Status: NIOSH Analytical Methods: see Formaldehyde (oxazolidine), 2502; (chromotropic acid), 3500
NIOSH Analytical Methods: see Formaldehyde (Girard T), 3501
NIOSH Current Intelligence Bulletin 34, April 1981
EPA TSCA Test Submission (TSCATS) Data Base, June 1988
EPA TSCA Chemical Inventory, 1986
EPA Genetox Program 1988, Positive: D melanogaster-reciprocal translocation
EPA Genetox Program 1988, Positive: N crassa-reversion; E coli polA without S9
EPA Genetox Program 1988, Positive: D melanogaster Sex-linked lethal
EPA Genetox Program 1988, Positive: S cerevisiae gene conversion; S cerevisiae-reversion
EPA Genetox Program 1988, Inconclusive: In vitro UDS-human fibroblast
EPA TSCA Section 8(e) Status Report 8EHQ-1079-0314
Meets criteria for proposed OSHA Medical Records Rule
EPA Genetox Program 1988, Positive: Carcinogenicity-mouse/rat
EPA Genetox Program 1988, Inconclusive: CHO gene mutation
Fatal dose is 60-90 mL [301]

SECTION 12: Ecological information

Toxicity

Biological Properties: Toxic for aquatic organisms. Protoplasmatic toxin. Caustic even in diluted form. Disinfectant effect. Toxic effect on fish and plankton. Sludge decomposition impaired or not possible even in diluted concentration. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities.

Acute Toxicity - Fish: LC50 (P.promelas): 24 mg/l /96 h (Formaldehyde);

LC50 (Br.rerio): 41 mg/l /96 h (Formaldehyde).

Acute Toxicity - Daphnia: Daphnia magna EC50: ~2 mg/l /48 h (Formaldehyde).

Acute Toxicity - Algae: Maximum permissible toxic concentration: Algeal toxicity: Sc.quadricauda IC5: 2.5 mg/l /8 d (Formaldehyde).

Acute Toxicity - Bacteria: Photobacterium phosphoreum EC50: 8.5 mg/l /30 min (Formaldehyde).
Bacterial toxicity: M.aeruginosa EC5: 0.39 mg/l /8 d (Formaldehyde).

Persistence and degradability
Abiotic degradation: Rapid degradation. (air, formaldehyde)
Biologic degradation: Biodegradation: 97.4 % /5 d (Formaldehyde). Readily biodegradable.
COD: 1.06 g/g (Formaldehyde); TOD: 1.068 g/g (Formaldehyde)

Bioaccumulative potential
No bioaccumulation is to be expected (log P(o/w <1).

Mobility in soil
Distribution: log p(o/w): 0.00 (Formaldehyde).

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Sewage disposal
No bioaccumulation is to be expected (log P(o/w <1).

Other disposal recommendations
Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP
Poison Schedule: S6

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)