

SAFETY DATA SHEET

FORMALDEHYDE SOLUTION AR

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA809

Product name : Formaldehyde solution AR

1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [Office hours]

2. Identification of dangers

2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Acute toxicity, oral, Category 2: Fatal if swallowed.

Acute toxicity, inhalation, Category 2: Fatal if inhaled.

Acute toxicity, dermal, Category 1: Fatal in contact with skin.

Skin corrosive, Category 1B: Causes severe skin burns and eye damage.

Skin sensitisation, Category 1: May cause an allergic skin reaction.

Germ cell mutagenicity, Category 2: Suspected of causing genetic defects.

Carcinogenicity, Category 1B: May cause cancer.

Specific target organ toxicity, single exposure, Eyes, Category 1: Causes damage to organs (Eyes).

Specific target organ toxicity, single exposure, Respiratory system, Category 3: May cause respiratory irritation.

2.2 Label elements.

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

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.

H331 : Toxic if inhaled.

H335 : May cause respiratory irritation.

H341 : Suspected of causing genetic defects.

H350 : May cause cancer.

H370 : Causes damage to organs (Eyes).

Precautionary statements (P) :

P260 : Do not breathe dust/fume/gas/mist/vapours/spray.

P301+P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 : IF ON SKIN: Wash with plenty of soap and water

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

2.3 Other hazards.

None known.

3. Composition/information on ingredients

Chemical nature: Aqueous solution.

3.1 Substance / Preparation.

Not applicable.

3.2 Mixture.

3.2.1 Formaldehyde solution

Formular: CH₂O

CAS No : 50-00-0

Molecular weight : 30.03

Content: >= 25 % <= 50 %

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Acute toxicity, oral, Category 2: Fatal if swallowed.

Acute toxicity, inhalation, Category 2: Fatal if inhaled.

Acute toxicity, dermal, Category 1: Fatal in contact with skin.

Skin corrosive, Category 1B: Causes severe skin burns and eye damage.

Skin sensitisation, Category 1: May cause an allergic skin reaction.

Germ cell mutagenicity, Category 2: Suspected of causing genetic defects.

Carcinogenicity, Category 1B: May cause cancer.

Hazard pictograms



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H301 : Toxic if swallowed.

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H331 : Toxic if inhaled.

H335 : May cause respiratory irritation.

H341 : Suspected of causing genetic defects.

H350 : May cause cancer.

3.2.2 Methanol

Formular: CH₃OH

CAS No : 67-56-1

Molecular weight : 32.04

Content: >= 10 % <= 20 %

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Flammable liquid, Category 2: Highly flammable liquid and vapour.

Acute toxicity, oral, Category 2: Fatal if swallowed.

Acute toxicity, inhalation, Category 2: Fatal if inhaled.

Acute toxicity, dermal, Category 1: Fatal in contact with skin.

Specific target organ toxicity, single exposure, Eyes, Category 1: Causes damage to organs (Eyes).

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

H225 : Highly flammable liquid and vapour.

H301 : Toxic if swallowed.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H370 : Causes damage to organs (Eyes).

3.2.3 Water

CAS No 7732-18-5

Contains no other components or impurities which will influence the classification of the product.

Mixture.

Not applicable.

4. First-aid measures

4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If unconscious, place them in a suitable position and seek medical assistance.

- Skin contact: Wash with plenty of water. Remove contaminated clothing. Seek medical assistance.
- Eyes: Wash with plenty of water, keeping eyelids open and seek medical assistance.
- Ingestion: Immediately give to drink plenty of water, never induce vomiting. Seek immediate medical assistance.
- 4.2 Most important symptoms and effects, both acute and delayed.
Corrosive and Harmful Product, contact with eyes or skin can cause allergic reactions, risk of blindness; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.
- 4.3 Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.
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5. Fire-fighting measures

- 5.1 Suitable extinguishing media.
Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- 5.2 Special hazards arising from the substance.
Special risks: Under fire conditions, hazardous fumes will be present. Exposure to combustion or decomposition products can be harmful to your health.
- 5.3 Advice for firefighters.
Do not enter fire area without proper protective equipment, including respiratory protection.
Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.
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6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures.
For exposure control and individual protection measures, see section 8.
- 6.2 Environmental precautions.
Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.
- 6.3 Methods and material for containment and cleaning up.
The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials. Collect spillage.
- 6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.
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7. Handling and storage

- 7.1 Precautions for safe handling.
Follow legislation on occupational health and safety. Keep the product in containers made of a material identical to the original. Do not eat, drink or smoke when using this product.
- 7.2 Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Well sealed containers. Away from sources of ignition and heat. No metal or containers.
- 7.3 Specific end use(s).
None.
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8. Exposure controls/personal protection

- 8.1 Control parameters.
The product does NOT contain substances with Professional Exposure Environmental Limit Values.
The product does NOT contain substances with Biological Limit Values.
- 8.2 Exposure controls.
Personal protection : Avoid all unnecessary exposure.
Respiratory protection : Wear approved mask.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Others : When using, do not eat, drink or smoke.
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9. Physical and chemical properties

- 9.1 Information on basic physical and chemical properties.
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| Appearance: | Liquid. |
| Colour: | Clear colourless to slightly opalescent. |
| Odour: | Piquant. |
| Odour threshold: | No data available. |
| pH value: | 2.8 - 4.0 |

Melting Point:	< -15 °C
Boiling Point:	93 - 96 °C
Flash point:	62 °C
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	7 %(V)
Upper Explosive Limit:	73 %(V)
Solubility:	No data available.
Density:	No data available.
Relative density:	1.09g/cm ³ (20 °C)
Partition coefficient (n-octanol/water):	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Auto-ignition temperature:	300 °C
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2 Other information.

None.

10. Stability and reactivity

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under room temperature.

10.3 Possibility of hazardous reactions.

Neutralization can occur on contact with bases.

10.4 Conditions to avoid.

Avoid strong heating. Exposure to light.

10.5 Incompatible materials.

Keep away from various metals, various alloys.

10.6 Hazardous decomposition products.

No data available.

11. Toxicological information

11.1 Information on toxicological effects.

Mixture

Acute toxicity. LD50 oral rat : 212.77 mg/kg

Inhalation: Toxic if inhaled.

Dermal: Toxic in contact with skin.

Ingestion: Toxic if swallowed.

Corrosion: Causes severe skin burns and eye damage.

Irritation: Based on available data, the classification criteria are not met.

Sensitization: May cause an allergic skin reaction.

Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: May cause cancer.

Toxic for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure: May cause respiratory irritation.

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.

12. Ecological information

Mixture

12.1 Toxicity.

Not established.

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Not established.

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

13. Disposal considerations

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information

14.1 UN number.

UN No: UN2209

14.2 UN proper shipping name.

ADR: UN 2209 FORMALDEHYDE SOLUTION, 8, III, (E)

IMDG: UN 2209 FORMALDEHYDE SOLUTION, 8, III

ICAO: UN 2209 FORMALDEHYDE SOLUTION, 8, III

14.3 Transport hazard class(es).

Class(es): 8

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

Labels: 8

Hazard number: 80

ADR LQ: 1 L

ICAO LQ: 1 L

Provisions concerning carriage in bulk ADR:

VC1 : Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2 : Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-B

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.2

Date published.

7-Oct-2017

Further information.

None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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