HURST SCIENTIFIC

Safety Data Sheet
Eosin Alcoholic with Phloxine

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Eosin Alcoholic with Phloxine
Product number	EOSPRBH-500M, 1L, 2.5L, 5L, 10L & 20L
Brand	Hurstchem

1.2 Other means of identification Eosin with Phloxine

1.3 Recommended use of the chemical and restrictions on use
Laboratory Reagent

1.4 Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

1.5 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 Harmonized System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as a **Dangerous good**s according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition)

2.1 Classification of the substance or mixture

- Flammable liquids, Cat. 2
- Eye damage/irritation, Cat. 2A

2.2 GHS label elements, including precautionary statements

Pictograms.

1. Flame; 2. Exclamation mark

Signal word **Danger**

Hazard statement(s)
H225 - Highly flammable liquid and vapor.
H302 - Harmful if swallowed.
H319 – Causes serious eye irritation.

Precautionary Statement (s):
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P233 Keep container tightly closed.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash skin thoroughly after handling.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local authority guidelines.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical Name	**CAS Number**	Concentration
Ethanol	64-17-5	Remainder
Eosin	17372-87-1	<5%
Acetic Acid	64-19-7	<1%
Phloxine B	18472-87-2	<1%
Aluminum Ammonium Sulfate Dodecahydrate	7784-26-1	<1%
Water	7732-18-5	<10%

SECTION 4: First-aid measures

4.1 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. Seek immediate medical attention.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly and rinse with Methylated Spirits. Seek medical attention immediately.
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 thoroughly with water. Seek immediate medical attention.

Personal protective equipment for first-aid responders
Eye wash station, safety shower and First Aid kit.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically and in accordance with narcotic intoxication.

SECTION 5: Fire-fighting measures

5.1	**Suitable extinguishing media**	Water fog or foam, keep containers cool with water spray.
5.2	**Specific hazards arising from the chemical**	Toxic gases may evolve.
5.3	**Special protective actions for fire-fighters**	Highly flammable liquid, contain spill and wear full fire kit and breathing. apparatus.
5.4	**Hazchem code**	**2YE**

SECTION 6: Accidental release measures

6.1 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.

6.3 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. Wash the affected area with a large volume of water. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities.
Store in tightly closed containers in a cool, dry environment away from sources of ignition and check regularly for leaks.

SECTION 8: Exposure controls/personal protection

National exposure standards	**Ethanol:** [TWA]: 1880mg/m3, 1000ppm **Acetic Acid (100%)**: [TWA] 10ppm, 25mg/m3 [STEL] 15ppm, 37mg/m3
Biological Limit Values	Not available for this mixture.
Engineering Controls	Ensure adequate ventilation to maintain airborne concentrations below national. exposure standards.
Personal Protective Equipment	Safety glasses or goggles, chemical-resistant gloves, and laboratory coat. If working within a confined area always use a suitable respirator.

Respiratory protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Appearance	Bright red liquid
Color	Bright red
Odor	Not evident
Melting point/freezing point	-117°C
Boiling point or initial boiling point and boiling range	78°C
Flammability	Highly Flammable
Flash point	12°C
pH	N/A
Solubility	In all portions
Vapor pressure	59hPa @20°C

Density and/or relative density	N/A
Relative vapor density	N/A

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.
Conditions to avoid	Heat, sparks, flame, and build-up of static
electricity. **Incompatible materials**	Strong alkalis, acids, nitrates, and oxidizing agents.
Hazardous decomposition products	Toxic gases may be emitted.
Hazardous reactions	Polymerization will not occur.

SECTION 11: Toxicological information

HEALTH EFFECTS:

Eye Contact	Vapor may irritate eyes, liquid and mists may severely irritate and damage the optic nerve.
Skin Contact	Skin contact may lead to slight irritation and/or redness.
Inhalation	Vapor is moderately irritating to the mucous membranes and respiratory tract. Caution, inhalation of the vapor may result in drunkenness, headache, nausea, Incoordination, narcosis and vomiting.
Ingestion	Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain, diarrhoea, headache, dizziness, and drowsiness with large doses.

Skin Corrosion / Irritation	No classification.
Serious Eye Damage / Irritation	Reversible effects to eyes.
Respiratory or Skin Sensitization	No classification.
Germ Cell Mutagenicity	No classification.
Carcinogenicity	No classification.
Reproductive Toxicity	No classification.
Specific Target Organ Toxicity (STOT) – Single Exposure	No classification.
Specific Target Organ Toxicity (STOT) – Repeated Exposure	No classification.
Aspiration Hazard	No classification.

TOXICITY:
Ethanol: LD50: (Oral, Rat) 7060mg/kg
LC50/4h (Inhalation, Rat) 3.8 mg l-1 h-1
Acetic Acid: LD50 (Oral, Rat) 3310 mg/kg
LD50 (Dermal, Rabbit) 1060mg/kg

SECTION 12: Ecological information

Toxicity	Not available.
Persistence and degradability	Not available.
Bioaccumulate potential	Not expected to bio-accumulate.
Mobility in soil	Not available.
Other adverse effects	Environmental fate (exposure) Do not contaminate drains and waterways. May cause long term effects to the aquatic environment.

SECTION 13: Disposal considerations

Product disposal
Dispose of material via a licensed contractor and in accordance with local authority guidelines.

Other disposal recommendations
Special precautions Nil.

SECTION 14: Transport information

Classified as ***Dangerous goods*** by the criteria of the Australian Dangerous Goods Code.

UN Number	1170
UN Proper shipping name	Ethanol (Ethanol solution)
Class and subsidiary risk	3
Packing group	II
Special precautions	Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidizing agents (Class 5.1), organic peroxides (Class 5.2), toxic substances (Class 6.1), infectious substances (Class 6.2) or radioactive substances (Class 7). Exemptions may apply.
Hazchem code	**2YE**

SECTION 15: Regulatory information

15.2 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

16.1 Further information/disclaimer

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); Can print: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).

16.2 Preparation 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.