HURST SCIENTIFIC

Safety Data Sheet
Neutral Red Alcoholic Solution

SECTION 1: Identification

GHS Product identifier

Product name	Neutral Red Alcoholic Solution
Product number	NR-500M
Brand	Hurstchem

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 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.

Classification of the substance or mixture

GHS classification in accordance with: Model WHS Regulations 2016

- Flammable liquids, Cat. 2
- Serious eye damage/eye irritation, Cat. 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
H319	Causes serious eye irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash … thoroughly after handling.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370+P378	In case of fire: Use … to extinguish.
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 to …

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Ethanol

Concentration	Balance
CAS no.	64-17-5

2. Neutral Red

Concentration	< 1 %
CAS no.	553-24-2

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 with a mechanical device if breathing ceases. Seek medical attention immediately.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. Seek immediate 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. Wash mouth out with copious amounts of water and seek immediate medical attention.

Personal protective equipment for first-aid responders

First aid facilities Eye wash station, safety shower and First Aid kit.

Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically and supportively.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water fog or foam. Keep containers cool with water spray.

Specific hazards arising from the chemical.
Toxic gases may evolve (Oxides of Carbon).

Special protective actions for fire-fighters
Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Further information
Hazchem code **2YE**

SECTION 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures
Eliminate all sources of ignition and take measures to prevent static discharge. Clear area of all persons not involved with the clean-up and ensure all others wear suitable protective equipment and breathing apparatus. Contain the spill or absorb using a suitable inert material such as vermiculite or sand etc...

Methods and materials for containment and cleaning up.
Wash the affected area with a large volume of water. De-gas any non-returnable containers prior to disposal and adhere to local government guidelines for the disposal of any material or packaging.

SECTION 7: Handling and storage

Precautions for safe handling
Use in well-ventilated areas away from all sources of ignition. Observe good personal hygiene practices and procedures to avoid contact with eyes, skin and clothing. Ensure containers are earthed when agitating or transferring product to avoid static discharge.

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. Store away from incompatibles.

SECTION 8: Exposure controls/personal protection

National exposure standards	**Ethanol (100%)**
	TWA: 1000 ppm/1880 mg m-3 (NES)
Biological Limit Values	None allocated.

Engineering Controls	Ensure adequate ventilation to maintain airborne concentrations below national exposure standards.
Personal Protective Equipment	Wear suitable protective clothing, safety glasses or chemical resistant splash-proof goggles to prevent eye contact and nitrile/neoprene gloves. If working within a confined area always use a suitable respirator.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Appearance	Liquid
Colour	Maroon
Odor	Alcohol odour
Melting point/freezing point	-117°C
Boiling point or initial boiling point and boiling range	78°C
Lower and upper explosion limit/flammability limit	Ethanol: 3.5% - 19%
Flash point	Ethanol: 13°C (closed cup)
Auto-ignition temperature	Ethanol: 392°C
pH	N/A
Solubility	Miscible with aqueous and organic solvents
Vapor pressure	N/A
Density and/or relative density	N/A
Relative vapor density	N/A

SECTION 10: Stability and reactivity

Reactivity
None known.

Chemical stability
Stable under recommended conditions for use and storage.

Possibility of hazardous reactions
Polymerisation will not occur.

Conditions to avoid.
Heat, direct sunlight, moisture, sparks, flame, and build-up of static electricity.

Incompatible materials
Strong oxidising agents, acids, strong alkalis, heat, and ignition sources.

Hazardous decomposition products
Can produce carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation	No classification.
Serious eye damage/irritation	Irritating to eyes.
Respiratory or skin sensitization	No classification.
Germ cell mutagenicity	No classification.

Carcinogenicity	No component is listed under the IARC.
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.

Additional information

HEALTH EFFECTS:

Eye Contact	Irritating to eyes. Exposure may result in lacrimation, irritation, pain, and redness.
Skin Contact	Skin irritant. Prolonged contact may result in drying and defatting of the skin, rash, and dermatitis. Toxic effects may result from skin absorption.
Ingestion	Chronic ingestion may result in cirrhosis of the liver. Over exposure may cause central nervous system depression. Low toxicity. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain, diarrhoea, headache, dizziness, and drowsiness with large doses. Liver damage may occur with high level of chronic ingestion.
Inhalation	Vapour is moderately irritating to the mucous membranes and respiratory tract. Caution, inhalation of the vapour may result in drunkenness, headache, nausea, Incoordination, narcosis, and vomiting.

CHRONIC

Eye Contact	Prolonged eye exposure to the product may severely irritate and damage the optic nerve, potentially leading to loss of sight.
Skin Contact	Prolonged or repeated exposure may cause cracking of the skin, dryness and dermatitis presented as redness, itching, and swelling.
Inhalation	Chronic exposure by inhalation/ingestion can lead to any of the effects. Detailed above under Acute: Ingestion.

TOXICITY DATA:

Ethanol (100%):	Inhalation LC50 Rat: 2000 ppm/10h Oral LD50 Rat: 7060 mg/kg Ingestion LD50 Mouse: 3450 mg/kg

SECTION 12: Ecological information

Toxicity
No data for this mixture.

Persistence and degradability
No data for this mixture.

Bioaccumulate potential
Not expected to bio-accumulate.

Mobility in soil
No data for this mixture.

Other adverse effects
Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Product disposal
Dispose of in accordance with local authority guidelines.

Packaging disposal
Dispose of in accordance with local authority guidelines.

SECTION 14: Transport information

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

UN Number: 1170
Class: 3
Packing Group: II
Proper Shipping Name: Ethanol (Ethyl Alcohol)
Special Precautions: No data available
Hazchem code: 2YE

SECTION 15: Regulatory information

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

Poison Schedule: Not Listed

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.

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