HURST SCIENTIFIC

Safety Data Sheet
Picro Orange G Solution

SECTION 1: Identification

GHS Product identifier

Product name	Picro Orange G Solution
Product number	POG-100M, 500M, 1lt
Brand	Hurstchem

Other means of identification

Picro Orange G Solution

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.
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

- Sensitization - skin, Cat. 1

GHS label elements, including precautionary statements

Pictograms

1. Exclamation mark

Signal word	**Warning**
Hazard statement(s)	
H317	May cause an allergic skin reaction
Precautionary statement(s)	
P261	Avoid breathing 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/hearing protection/ ...
P302+P352	IF ON SKIN: Wash with plenty of water/...
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Picric acid	
Concentration	> 1 %
CAS no.	88-89-1
2. Water	
Concentration	Balance
CAS no.	7732-18-5
3. ORANGE G	
Concentration	10 %
CAS no.	1936-15-8

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. Apply artificial respiration if not breathing. Seek medical attention.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. If irritation develops, seek medical attention.
In case of eye contact	Flush eyes with copious amounts of water for at least 15 minutes. Seek medical attention.
If swallowed	DO NOT induce vomiting. Rinse mouth out with water. Give water to drink if patient is conscious. Seek medical attention.

Personal protective equipment for first-aid responders

Eye wash station, safety shower and First Aid kit.

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

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water spray, Dry chemical, Carbon Dioxide or Alcohol-resistant foam.

Specific hazards arising from the chemical
Explosive when dry. Potentially explosive in a fire situation. Evacuate area and contact emergency services. Toxic gases (Carbon/Nitrogen oxides) may evolve. Use water fog to cool intact containers. Do not sweep up dry residues.

Special protective actions for fire-fighters
Fire fighters should wear a positive-pressure Self-Contained Breathing Apparatus (SCBA) and protective clothing (includes helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas where gases or fumes can accumulate. Do not use direct water stream. Eliminate ignition sources.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear full protective clothing. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid walking through spilled
product as it may be slippery. Stop leak if safe to do so. Do NOT let product contaminate drains or waterways. If product does enter a waterway, advise
the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

Methods and materials for containment and cleaning up
Soak up using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. Collect material into suitably labelled dry
chemical- waste containers and dispose of promptly as hazardous waste.

SECTION 7: Handling and storage

Precautions for safe handling
Use only in an adequately ventilated area. Avoid breathing in mists or vapours. Wear appropriate protective clothing to avoid any exposure and practice good personal hygiene. Keep containers closed when not in use.

Conditions for safe storage, including any incompatibilities
Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, heat sources and incompatible materials. Keep container closed when not in use. Keep wet with water.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 88-89-1
Picric acid
AU/SWA (Australia): 0.1 mg/m3 TWA inhalation

Appropriate engineering controls
Ensure adequate ventilation. Only trained personnel should be exposed to this product.

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

Eye/face protection
Safety glasses or goggles, chemical-resistant gloves and laboratory coat.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Color	Bright Orange
Odor	Odourless
Melting point/freezing point	0°C
Boiling point or initial boiling point and boiling range	100°C
Lower and upper explosion limit/flammability limit	Not available
pH	Not available
Solubility	Not available
Vapor pressure	Not available
Density and/or relative density	1.0

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
Direct sunlight. Extremely high or low temperatures. Picric acid forms salts with many metals some of which are rather sensitive to heat, friction, or impact, and should be considered dangerously sensitive. Contact of picric acid with concrete floors may form the friction-sensitive calcium salt. Dry
mixtures of picric acid and aluminium powder are inert, but the addition of water causes ignition after a delay dependent upon the quantity added. Material older than 2 years should be disposed of. Inspect and add water every six months as needed. Rotate containers to distribute water every three
months.

Incompatible materials
Strong reducing agents. Strong acids. Strong oxidizers, heavy metals, heavy metal salts and Ammonia.

Hazardous decomposition products
During a fire, irritating and highly toxic gases may be generated.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Eye Contact Can result in pain, redness and irritation.
Skin Contact Can result in dermatitis and discolouration. Can be absorbed through unbroken skin. May cause an allergic reaction.
Inhalation Irritating to mucous membranes of the respiratory tract, dizziness, muscle pain and kidney problems.
Ingestion Can cause irritation to the mucous membranes, headache, nausea, vomiting and diarrhoea.
Chronic: Chronic exposure may result in vomiting, diarrhoea, muscle pain, weakness, skin discolouration and kidney and liver damage and destruction of red blood cells.

Skin corrosion/irritation
May cause an allergic skin reaction.

Serious eye damage/irritation
No data available.

Respiratory or skin sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
No classification under IARC monographs.

Reproductive toxicity
No data available.

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

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

Aspiration hazard
No data available.

Additional information
Picric Acid Saturated: Oral LD50 Rat: >60,000mg/kg

SECTION 12: Ecological information

Toxicity
No data available.

Persistence and degradability
No data available.

Bioaccumulative potential
Not expected to bio-accumulate.

Mobility in soil
No data available.

Other adverse effects
Environmental fate (exposure) Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of in accordance with local authority guidelines.

Packaging disposal
Dispose of in accordance with local authority guidelines.

Other disposal recommendations
Special precautions Nil.

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.

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).