Safety Data Sheet

Non-Hazardous, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: POWERCOOL N1 REAGENT

Synonyms
POWERCOOL N1 REAGENT - 65 mL

Product Code
PEN40861.65

Recommended use: Field Test Kit and Laboratory reagent.

Supplier: Penske Australia
ABN: 47 073 690 990
Street Address: 488 Blackshaws Road
Altona North, Victoria 3025
Australia
Telephone: (03) 9243 9292
Facsimile: (03) 9243 9271

Emergency Telephone number: **1800 625 526**

2. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of Safe Work Australia GHS 7.

Signal Word
Warning

Hazard Classifications
Acute Hazard to the Aquatic Environment - Category 1
Chronic Hazard to the Aquatic Environment - Category 1

Hazard Statement
H410 Very toxic to aquatic life with long lasting effects.

Prevention Precautionary Statement
P273 Avoid release to the environment.

Response Precautionary Statement
P391 Collect spillage.

Storage Precautionary Statement
Not allocated

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: Unknown

DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
1,10-Phenanthroline, monohydrate	5144-89-8	0 - 2 %
Ingredients determined to be Non-Hazardous		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

Firefighting further advice: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Clean up all spills immediately. Wear protective personal equipment during all clean up. Contain the spill, and absorb spill with rags, inert material, or vermiculite. Place in a suitable, labelled container for waste disposal. Wash the clean-up area and fully ventilate.

LARGE SPILLS
Clean up all spills immediately. Wear protective personal equipment during all clean-up operations. Avoid breathing vapours and contact with skin and eyes. Contain and absorb spill with sand, earth, inert material, or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal, according to local, state, or federal regulations.

Dangerous Goods - Initial Emergency Response Guide No: Not applicable

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Storage: Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Recommended storage temp: 20°C +/- 5°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Natural ventilation should be adequate under normal use conditions.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

RECOMMENDATIONS FOR CONSUMER USE:
Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Applying skin-protecting agents and skin cosmetics is recommended after use.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes, or clothing. Wash all exposed skin before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Material Family:	Aqueous Formulation
Form:	Liquid
Colour:	Dark Red
Odour:	Odourless
Solubility in water:	miscible in any proportion
Specific Gravity:	Approx 1.0
Density:	1.006 g/cm3 @ 20 'C
Relative Vapour Density (air=1):	>1
Vapour Pressure:	N Av
Flash Point (°C):	N App
Explosion/Flammability Limits:	N App
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	< 0 'C
Boiling Point/Range (°C):	100 'C
pH:	< 6
Viscosity:	N Av
Partition Coefficient:	N Av
Total VOC (g/Litre):	N Av
Oxidising properties:	N App

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Stable at ambient temperature (room temperature).

Conditions to avoid: Heat and Direct Sunlight.

Incompatible materials: Oxidizing agents.

Hazardous decomposition products: In case of fire may be liberated: May produce toxic fumes of carbon monoxide if burning.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes

Skin contact: Contact with skin may result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): LC_{50} > 20.0 mg/L for vapours or LC_{50} > 5.0 mg/L for dust and mist.

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): LD_{50} > 2,000 mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): LD_{50} > 2,000 mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive toxicant.

Specific target organ toxicity (repeat exposure): This material has been classified as not a specific hazard to target organs by repeat exposure.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 1 Hazard. Acute toxicity estimate (based on ingredients): ≤ 1 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 1 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): <1 mg/L, where the substance is not rapidly degradable and/or BCF ≥ 500 and/or log K_{ow} ≥ 4.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Do NOT release into the environment. Do not reuse container. Dispose the product, residue and packaging to special waste collection point according to local, state, or federal regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:
Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
Basel Convention (Hazardous Waste)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): Unknown.

AICIS Status: All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC).

NZ EPA Status: All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

HSNO Group Standard: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2020

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16. OTHER INFORMATION

Reason for issue: 5 Yearly Revision

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions. We expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. Penske Australia and New Zealand assumes no responsibility for accuracy of information unless the document is the most current available from an official Penske Australia and New Zealand distribution system.

SDS Abbreviations Legend:

<	Less Than
>	Greater Than
AICIS	Australian Industrial Chemicals Introduction Scheme
atm	Atmosphere
CAS	Chemical Abstracts Service (Registry Number)
cm²	Square Centimetres
CO2	Carbon Dioxide
COD	Chemical Oxygen Demand
°C	Degrees Celcius
EPA (New Zealand)	Environmental Protection Authority of New Zealand
°F	Degrees Fahrenheit
G	Grams
g/cm³	Grams per Cubic Centimetre
g/l	Grams per Litre
HSNO	Hazardous Substance and New Organism
Immiscible	Liquids are insoluble in each other**.**
K	Kelvin
Kg	Kilogram
kg/m³	Kilograms per Cubic Metre

Lb	Pound
LC50 or LC_{50}	LC stands for lethal concentration.
LC50 or LC_{50}	is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period, usually 1 or 4 hours.
LD50 or LD_{50}	LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
L	Litre
m^3	Cubic Metre mbar Millibar mg Milligram
mg/24H	Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m^3 Milligrams per Cubic Metre
Miscible	Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm	Millimetre
mmH2O	Millimetres of Water
mmHg	Millimetres of Mercury
mPa/s	Millipascals Second
N App	Not Applicable
N Av	Not Available
Pa	Pascal
ppb	Parts per Billion
ppm	Parts per Million
ppm/2h	Parts per Million per 2 Hours
ppm/6h	Parts per Million per 6 Hours
Psi	Pounds per Square Inch
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average
ug/24H	Micrograms per 24 Hours
UN	United Nations
Wt	Weight

END OF SDS