SAFETY DATA SHEET

PHOSPHORIC ACID - 85%

Infosafe No.: 1HH25
ISSUED Date : 28/05/2019
ISSUED by: CULBEAG HOLDINGS Pty Ltd

CLASSIFIED AS HAZARDOUS

1. IDENTIFICATION

GHS Product Identifier
PHOSPHORIC ACID - 85%

Product Code
PHAD

Company Name
CULBEAG HOLDINGS Pty Ltd (ABN 95 007 197 079)

Address
19 Allied Drive Tullamarine
VICTORIA 3043 Australia

Telephone/Fax Number
Tel: 03 9335 4400
Fax: 03 9335 1750

Emergency phone number
03 9335 4400

Emergency Contact Name
Mr Ian Cameron

E-mail Address
sales@culbeag.com.au

Recommended use of the chemical and restrictions on use
Pickling and rust proofing metals, electro-polishing, water treatment, binder for ceramics, soaps and detergents, laboratory reagent.

Additional Information
Where a [*] is inserted in text, this is a referral to the list of References in Section 16.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
Classified as a DANGEROUS GOOD as Class 8 - CORROSIVE according to the Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road and Rail*.
Classified as HAZARDOUS CHEMICAL according to the Globally Harmonised System of the Classification and Labelling of Chemicals (GHS)including Work, Health and Safety regulations, Australia*.
Applicable classifications are:-

Skin Corrosion: Sub- Category 1B
Eye Damage: Category 1
Corrosive to Metals: Category 1.
Acute Toxicity - Oral: Category 4.

Hazard Statement (s)
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statement – Prevention

P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see or refer to First Aid Measures in Safety Data Sheet (Section 4) or on this label).
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Precautionary statement – Storage
P405 Store locked up.
P406 Store in corrosion resistant container or in a container with a corrosion resistant liner.

Precautionary statement – Disposal
P501 Dispose of contents and/or container in accordance with State, Territorial or Commonwealth regulations.

Supplemental Information
Product is classified as a Schedule 6 Poison [*].
Product is hazardous to aquatic systems.

Other Information
In Australia the "POISON CENTER" is the Poisons Information Centre (Telephone 131126).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Phosphoric Acid.	7664-38-2	>80%
Water And Minor Components	N/A	BALANCE TO 100%

4. FIRST-AID MEASURES

Inhalation
Remove affected person to fresh air. If not breathing apply artificial respiration. If breathing is difficult, oxygen can be given by a person trained in the procedure. In any situation seek medical attention promptly or transport to an emergency hospital.

Ingestion
Never give fluids by mouth or induce vomiting if patient is unconscious or having convulsions.
If swallowed do NOT induce vomiting. If conscious and alert give 1 or 2 glasses of water initially to rinse the mouth. Do NOT swallow rinse water. Give a glass of water to drink. Obtain medical advice promptly or transfer to an emergency hospital.

Skin
If skin or hair contact occurs remove contaminated clothing immediately and wash contact area with flowing water for at least 15 minutes. If irritation persists or tissue damage occurs i.e. burns, seek medical attention promptly or take patient to an emergency hospital. Wash clothing before re-use. Discard contaminated foot wear.

Eye contact
If in eye(s), hold eyelid(s) apart and flush the eye continuously with flowing water. Remove contact lenses, if present, and easy to remove. Continue fluhing until advised to stop by the Poison Information Centre or a doctor or for at least 15 minutes.

First Aid Facilities
Safety shower and an eye wash fountain. Drinking quality water.

Advice to Doctor
Treat symptomatically as for a chemical burn.

Indication of immediate medical attention and special treatment needed if necessary
For advice, contact the POISONS INFORMATION CENTRE (Phone 13 1126) or a doctor.

5. FIRE-FIGHTING MEASURES

Fire Fighting Measures
Product does not burn.

Suitable Extinguishing Media
The media used to extinguish the surrounding fire should be adequate.
Use water spray to cool intact containers to prevent overpressurisation and container rupture.

Hazards from Combustion Products
Product will decompose, if heated, releasing oxides of phosphorus.

Special Protective Equipment for fire fighters
If product is exposed to fire wear a self contained breathing apparatus in addtion to standard fire-fighting clothing and protective equipment.

Hazchem Code
2R

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal
Clear area of non-essential personnel. Wear appropriate personal protective clothing and equipment when managing the product spill. Contain spill with either sand or soil to prevent entry into sewer drains or watercourses. Do NOT use sawdust. Collect for use or disposal at an approved disposal site. Neutralise residual acid at the spill site with a dilute solution of sodium carbonate. Wash neutralised products away with plenty of water.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Keep product container dry and away from heat.
Avoid contact with eyes and skin. Wear protective clothing and equipment when handling product.

Conditions for safe storage, including any incompatibilities
Product is classified as a DANGEROUS GOOD, Class 8 - CORROSIVE for storage. Product should be stored and handled in accord with the statutory regulations for the Storage and Handling of Dangerous Goods. Store in a cool dry location with acid resistant floors. Product may crystallize if storage temperature is less than 23°C. Keep lid of container closed at all times when not in use. Store away from food, foodstuffs, alkalis, oxidising agents, amines, ammonia and sulfuric acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
National Exposure Standard (NES)[*] declared by SWA [*] for the workplace environment for;
PHOSPHORIC ACID: 1 mg/cubic metre, TWA. 3 mg/cubic metre, STEL; where
TWA - means the Time Weighted Average concentration of a particular substance determined over a normal 8-hour working period for a 5-day working 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 8-hour work day.

Appropriate Engineering Controls
Local exhaust ventilation or good general ventilation should be used to maintain the airborne concentration in a workplace below National Exposure Standards [*]. It is better to use local exhaust ventilation as this limits the diffusion of the product into the general workplace.

Respiratory Protection
Personal respiratory protection is recommended as an added control particularly where workplace atmospheric concentrations of phosphoric acid may exceed the WES for the workplace. Select and fit an approved air-purifying respirator according to AS/NZS 1715 [*] and AS/NZS 1716 [*].

Eye Protection
Wear approved chemical goggles. Eye protection complying with AS/NZS 1337 [*] should be worn to protect against splashes/ droplets of phosphoric acid entering the eye. Guidance to recommended practices for eye protection in the industrial environment is provided in AS/NZS 1336 [*]. Ensure that an eye wash facility is readily available in the work area or where the product is being handled and used.

Body Protection
Wear approved,long-sleeved body-covering overalls and footwear. Refer to Australian Standard for general requirements of occupational protective clothing [*]and test methods [*] for resistance of materials to liquid chemicals. Use gloves, boots and aprons suitable for the proposed operations. Rubber, PVC or neoprene are suggested protective materials for this equipment. Remove contaminated clothing promptly. Wash contaminated clothing before re-use. Discard contaminated footwear. Safety shower should be readily accessible in the workplace.

Hygiene Measures
It is a good work practice to wash hands, arms and face before eating, drinking or using toilet facilities and at the end of each work period.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Colourles, odourless viscous liquid.

Freezing Point
23°C

Boiling Point
156 - 158°C

Solubility in Water
Soluble

Specific Gravity
1.69 @ 25°C

pH
1.5 for 1% w/v aqueous solution.

Vapour Pressure
0.004kPa [0.03 mm Hg]

Vapour Density (Air=1)
3.4 (Air = 1)

Flash Point
No flash point - not combustible.

Explosion Properties
None

10. STABILITY AND REACTIVITY

Chemical Stability
Stable at ambient conditions.

Reactivity and Stability
Corrodes metals.

Conditions to Avoid
Freezing temperatures. Freezing Point is 23°C but product can supercool without crystallising. Avoid contact with foodstuffs.

Incompatible materials
Corrosive to metals and liberates hydrogen which can form explosive mixtures in air. Avoid uncontrolled contact with mild steel, cast iron, aluminium, aluminium alloys, brasses, tinned or galvanised materials. Avoid contact with food, foodstuffs, strong bases, strong oxidizing agents, amines, ammonia and sulfuric acid.

Hazardous Decomposition Products
Phosphorus oxides formed when product decomposes.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
For phosphoric acid;
LD50 oral, rat; 1530 mg/kg
LD50 dermal, rat; 2740 mg/kg
LC50 inhalation, 1 hour, rat; >850 mg/cubic metre
Draize test, rabbit,eye; severe
Draize test, rabbit, skin; severe

Ingestion
Corrosive. Cause severe irritation and burns to the mouth, throat and stomach if swallowed. Causes abdominal pain and nausea.

Inhalation
Inhalation effects at ambient conditions due to vapour of phosphoric acid are low due to the low vapour pressure of product. However mists or vapour of heated product may cause irritation of mucuous membranes and upper respiratory tract.

Skin
Corrosive. Causes redness i.e. severe irritation, pain and severe skin burns.

Eye
Corrosive. Causes severe eye irritation, pain, blurred vision, eye burns and possible permanent damage to eyes.

Chronic Effects
Repeated or prolonged exposure to mists will cause necrosis of nasal system and pulmonary (lungs) effects.

12. ECOLOGICAL INFORMATION

Environmental Protection
Avoid entry of product into drains, sewers, and watercourses.
Hazardous to aquatic life at point of entry where pH drops below 4. Phosphate ion will persist but acidity may be countered by reaction with heavy metals in water system. Phosphoric acid will migrate through soils dissolving carbonate-based materials. However significnat amounts of acid will migrate to the groundwater table.

13. DISPOSAL CONSIDERATIONS

Waste Disposal
Dispose of wastes in an approved waste disposal system in accordance with State, Territorial or Commonwealth waste disposal regulations.

Container Disposal
Neutralise residual acid in "empty" container with dilute solution of sodium carbonate (soda ash). Triple wash container with water. Dispose of rinse water responsibly. Do not use container for any other purpose. Recycle container if possible.

14. TRANSPORT INFORMATION

Transport Information
Product is classified as a Dangerous Good for Transport by Road, Rail, Sea or Air.

U.N. Number
1805

UN proper shipping name
PHOSPHORIC ACID, SOLUTION

Transport hazard class(es)
8

Packing Group
III

Hazchem Code
2R

IERG Number
37

15. REGULATORY INFORMATION

Regulatory information
Product is classified as a DANGEROUS GOOD - CLASS 8 - CORROSIVE [*]; and as a
HAZARDOUS CHEMICAL [*] with a classification of:-
- Skin Corrosion - Sub-Category 1B;
- Eye Damage - Category 1.
- Corrosive to metals - Category 1; and
- Harmful if swallowed - Category 4

Product is classed as Schedule 6 Poison if repackaged for retail sales.

Poisons Schedule
S6

Packaging & Labelling
Use polyethylene lined drums or polyethylene containers for packaging or storing the product.
Labelling (marking) in accordance with the ADG code [*] with a Class 8 label plus UN Number and Proper Shipping Name.
Labelling in accordance with hazardous chemical code for Labelling workplace chemicals* that requires the following hazard statements;-

- Causes severe burns and eye damage;
- Causes serious eye damage;
- Harmful if swallowed, and
- May be corrosive to metals; and supported by

Pictograms, Signal word, Prevention Statements; Response Statements; Storage and Disposal Statements.
Refer to Section 2 of this document for specific statements.

If repackaged for retail sale labelling should conform with the National Poisons Standard [*]formerly the Standard for Uniform Scheduling of Medicines and Poisons.[*]

Australia (AICS)
The principal ingredient is included in the Australian Inventory of Chemical Substances (AICS)[*].

16. OTHER INFORMATION

Date of preparation or last revision of SDS
Revised Safety Data Sheet (SDS) 28/05/2019. SDS is in the format described in the National Code of Practice for preparing a Safety Data Sheet [*]. Revised Section 2 - included Hazard Statement 'Harmful if swallowed', extra GHS pictogram, added comment re "POISON CENTER". added comment re aquatic environment. Substituted 'National' for 'Workplace' in Section 8 & used NES as new acronym with respect to exposure standards. Included reference to food/foodstuffs in Safe Storage (Section 7) and Incompatible Materials (Section 10) Revised Hazard statements for labelling. Revised Section 16 - Literature References. Changed from numbering references to use of [*] throughout document plus inserted a statement in Section 1 about relevance of [*]throughout the SDS.

References
*Australian Dangerous Goods Code, as amended.
*Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
*NES = National Exposure Standards for Atmospheric Contaminants in the Occupational Environment in Exposure Standards section of Hazardous Substances Information System [HSIS], as amended by SWA.
*SWA = Safe Work Australia
*AS = Australian Standard
*NZS = New Zealand Standard
*AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.
*AS/NZS 1716: Respiratory protective devices.
*AS/NZS 1337: Eye protectors for the industrial applications.
*AS/NZS 1336: Recommended practices for eye protection in the industrial environment.

*AS/NZS 4501.2:2006 Occupational protective clothing - General requirements.
*AS/NZS ISO 6529:2006 - Protective clothing - Protection against chemicals - Determination of resistance of protective clothing materials to permeation by liquids and gases.
*AS/NZS ISO 6530 Protective clothing-Protection against liquid chemicals - Test method for resistance of materials to penetration by liquids.
*Labelling of Workplace Hazardous Chemicals Code of Practice. SWA, September 2015.
*Australian Inventory of Chemical Substances maintained by National Industrial Chemicals Notification and Assessment scheme. (www.nicnas.gov.au).
*Preparation of Safety Data Sheets for Workplace Hazardous Chemicals Code of Practice., SWA 2nd Edition.

Contact Person/Point
BUSINESS HOURS: Product Information Officer, (03) 9335 4400

This SDS summarises our best knowledge of the health and safety hazard information of this product and how to safely handle and use the product in the workplace. Each user must review this SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is available on our website at www.culbeag.com.au

END OF SDS