

infosafe cs: 1.7.2

chem-supply Page: 1 of 5

Infosafe No™ 1CHRB Issue Date : June 2019 RE-ISSUED by CHEMSUPP

Product Name: dodeca-MOLYBDOPHOSPHORIC ACID

Classified as hazardous

1. Identification

**GHS Product** 

dodeca-MOLYBDOPHOSPHORIC ACID

Identifier

Company Name CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

Address 38 - 50 Bedford Street GILLMAN

SA 5013 Australia

Telephone/Fax Number

Tel: (08) 8440-2000 Fax: (08) 8440-2001

**Emergency phone** 

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

number

Recommended use of the chemical and restrictions on use

Reagent for alkaloids; pigments; catalyst; fixing agent in photography; additive in plating processes;

MA097

imparts water resistance to plastics, adhesives, and cement.

Other Names <u>Name</u> <u>Product Code</u>

dodeca-MOLYBDOPHOSPHORIC ACID AR

Phosphomolybdic acid hydrate, Molybdatophosphoric acid, 12-Molybdophosphoric acid, Molybdatophosphoric acid hydrate,

Phosphomolybdic acid

Other Information

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

#### 2. Hazard Identification

GHS classification

of the

Eye Damage/Irritation: Category 1 Oxidizing Solids: Category 3

substance/mixture

Skin Corrosion/Irritation: Category 1B

Signal Word (s)

**DANGER** 

**Hazard Statement** 

H272 May intensify fire; oxidiser.

(e)

H314 Causes severe skin burns and eye damage.

Pictogram (s) Corrosion, Flame over circle





Precautionary statement –

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

statement – Prevention

P220 Keep/Store away from clothing/.../combustible materials. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Precautionary statement – Response

P301+P330+P361 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

skin with water/shower.

P310 Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P370+P378 In case of fire: Use water (flooding) or sand for extinction.

Print Date: 20/06/2019 CS: 1.7.2



infosafe CS: 1.7.2

Chem-supply Page: 2 of 5

Infosafe No™ 1CHRB Issue Date : June 2019 RE-ISSUED by CHEMSUPP

Product Name: dodeca-MOLYBDOPHOSPHORIC ACID

Classified as hazardous

Precautionary

P405 Store locked up.

statement – Storage Precautionary

P501 Dispose of contents/container to an approved waste disposal plant.

statement – Disposal

3. Composition/information on ingredients

Chemical

Solid

Characterization

Ingredients Name CAS Proportion Hazard Symbol Risk Phrase

Molybdophosphoric acid 51429-74-4 100 %

4. First-aid measures

**Inhalation** If inhaled, remove from contaminated area to fresh air immediately. If breathing is difficult, give oxygen.

Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth

resuscitation. Immediately medical attention is required.

Ingestion Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed.

DO NOT INDUCE VOMITING. Seek immediate medical advice.

**Skin** Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes.

Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the

severity.

**Eye contact** Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.

Seek immediate medical assistance.

First Aid Facilities Maintain eyewash fountain and safety shower in work area.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of the patient.

Other Information For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand

0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products

**Specific Methods** 

May librate toxic fumes in fire (i.e. phosphorus oxides and metal oxide fume).

Small fire: Use flooding quantities of water. DO NOT use dry chemical, CO2 or foam. If safe to do so, move undamaged containers from the fire area. DO NOT move cargo if cargo has been exposed to

heat.

Large fire: Flood fire area with water from a protected position. Cool containers with flooding quantities of water until well after the fire is out. If possible, withdraw from area and let it burn. Avoid getting water

inside the containers; a violent reaction may occur. Dam fire control water for later disposal.

Specific hazards arising from the chemical Will accelerate burning when involved in a fire. May explode on heating, shock, friction or contamination. Some will react explosively with hydrocarbons (fuels). May ignite combustibles (wood, paper, clothing, etc). Fire may produce irritating, poisonous, and/or corrosive gases. Containers may explode on heating.

Runoff may create fire or explosion hazard.

Hazchem Code 2V

Precautions in connection with Fire

Wear SCBA and chemical splash suit. Structural firefighter's uniform will provide limited protection.

#### 6. Accidental release measures

Spills & Disposal

Do not contaminate. Keep combustibles (wood, paper, clothing, oil, etc.) away from the spilled material. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Use water spray to knock down vapours or divert vapour clouds. Prevent entry into waterways, drains or confined areas. Prevent exposure to heat.

Dry Spill: Use clean non-sparking tools to transfer material to a clean, dry plastic container and cover loosely. Move container from spill area.

Small Liquid Spill: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place in a loosely-covered container for later disposal.

Large Liquid Spill:

SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

Personal Precautions

Ventilate contaminated area thoroughly. Avoid raising a dust cloud.

Print Date: 20/06/2019 CS: 1.7.2



infosafe CS: 1.7.2

Page: 3 of 5 chem-supply

Infosafe No™ 1CHRB RE-ISSUED by CHEMSUPP Issue Date: June 2019

dodeca-MOLYBDOPHOSPHORIC ACID Product Name:

Classified as hazardous

Personal Protection Wear protective clothing specified for normal operations (see Section 8)

Clean-up Methods -Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in

**Small Spillages** accordance with local regulations.

7. Handling and storage

Handling

Precautions for Safe Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin and eyes. Do not breath fumes which may accumulate in the vapour head-space of containers. Use in well ventilated areas away from all ignition sources. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any

Store in cool place and out of direct sunlight. Store in well ventilated area. Store away from sources of heat or ignition. Store away from combustible materials. Store away from foodstuffs. Keep containers

incompatabilities

Storage Regulations Refer Australian Standard AS 3780-1994 'The storage and handling of corrosive substances'. Refer Australian Standard AS 4326-1995 'The storage and handling of oxidizing agents'.

8. Exposure controls/personal protection

Occupational exposure limit values

**STEL** TWA Name

<u>mg/m3</u> ppm <u>mg/m3</u> ppm **Footnote** Molybdophosphoric acid Molybden 5 um. soluble compoun ds (as Mo)

Other Exposure Information

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

A time weighted average (TWA) has been established for Molybdenum, soluble compounds (as Mo) (Safe Work Australia) of 5 mg/m³. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. In industrial situations maintain the concentrations values below the TWA. This may be achieved by

**Appropriate** 

engineering controls process modification, use of local exhaust ventilation, capturing substances at the source. or other methods. These methods should be used in preference to personal protective equipment.

Respiratory **Protection** 

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection,

fit testing, training, maintenance and inspection.

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. **Eye Protection** Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves -

Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by

appropriate risk assessments.

Recommendation: Rubber or plastic gloves.

**Personal Protective Equipment** 

**Hand Protection** 

Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, **Footwear** 

Occupational protective footwear - Guide to selection, care and use.

**Body Protection** Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection

against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other **Hygiene Measures** 

Print Date: 20/06/2019 CS: 172



infosafe CS: 1.7.2

Page: 4 of 5 chem-supply

1CHRB Issue Date: June 2019 RE-ISSUED by CHEMSUPP Infosafe No™

dodeca-MOLYBDOPHOSPHORIC ACID Product Name:

Classified as hazardous

protective equipment before storing or re-using.

9. Physical and chemical properties

**Form** Solid

**Appearance** Yellowish crystals.

Odour Odourless.

**Melting Point** 78 - 90 °C (anydrous).

Solubility in Water Soluble.

Solubility in Organic Soluble in methanol and diethyl ether.

**Solvents** 

**Specific Gravity** 0.98 (bulk). Strongly acidic.

**Flammability** Not combustible but assists combustion of other substances.

**Molecular Weight** 1825.28 (anhydrous)

Other Information Strong oxidizing agent in aqueous solution. Strong acid in free acid form.

10. Stability and reactivity

**Chemical Stability** Stable under normal use conditions. Hygroscopic

**Conditions to Avoid** Exposure to moisture. Exposure to air. Heat, flames, ignition sources and incompatibles.

Incompatible

**Materials** 

Phosphorus oxides and metal oxide fume.

Hazardous **Decomposition** 

**Products** 

Skin

**Hazardous** Will not occur.

**Polymerization** 

#### 11. Toxicological Information

Ingestion can cause severe burns of the mouth, throat, oesophagus and stomach. Symptoms include Ingestion

sore throat, gastrointestinal irritation, vomiting, diarrhea, coma or death. May cause dmamage to liver

Strong bases, reducing agents, easily oxidized materials, organic materials and metal powders.

and kidney organs.

Inhalation Inhalation can cause severe irritation of mucous membranes and upper respiratory tract. Symptoms may

include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. High concentrations causes burns or severe injurying causing possible damage to lungs

including respiratory inflammation, edema, chemical pneumonitis, unconsciousness or death. Causes severe skin burns with discoloration and pain.

Causes burns. Contact can cause blurred vision, redness, irritation, pain and severe tissue burns to the Eye

eves. May result in permanent damage and complete vision loss.

Carcinogenicity No evidence of carcinogenic properties.

No evidence of mutagenic effects. Mutagenicity

Other Information To the best of our knowledge the chemical, physical and toxicity of this substance has not been fully

investigated.

12. Ecological information

Quantitative data on the ecological effect of this product are not available. **Ecotoxicity** 

degradability

Persistence and Peristence is unlikely, soluble in water.

#### 13. Disposal considerations

Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, Disposal

state and federal government regulations. **Considerations** 

14. Transport information

Dangerous Goods of Class 8 Corrosives are incompatible in a placard load with any of the following: -**Transport** Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 Information

Print Date: 20/06/2019 CS: 172



infosafe CS: 1.7.2

Page: 5 of 5 chem-supply

1CHRB RE-ISSUED by CHEMSUPP Infosafe No™ Issue Date: June 2019

dodeca-MOLYBDOPHOSPHORIC ACID Product Name:

Classified as hazardous

dangerous goods are acids and Class 7. Dangerous Goods of Class 5.1 Oxidising Agents are

incompatible in a placard load with any of the following: - Class 1, Class 2.1, Class 2.3, Class 3, Class 4,

Class 5.2, Class 7, Class 8, Fire risk substances and combustible liquids.

**U.N. Number** 

8

31

**UN** proper shipping

CORROSIVE SOLID, OXIDIZING N.O.S. - (Contains dodeac-Molybdophosphoric acid)

name

Transport hazard

**IERG Number** 

class(es)

5.1 Sub.Risk 2W **Hazchem Code** 3.8.8 **Packaging Method Packing Group** Ш **EPG Number** 8D1

15. Regulatory information

Regulatory Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation Information 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

**Poisons Schedule** Not Scheduled

#### 16. Other Information

Date of preparation

or last revision of

**SDS** 

Literature References 'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.

Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons,

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road

and Rail 7th. Ed.', 2007.

Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous

Chemicals', 2011.

Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide',

Standards Australia/Standards New Zealand, 2010.

Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.

Safe Work Australia, 'Hazardous Chemical Information System, 2005'.

Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances

(2011)'

Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational

Environment [NOHSC:1003(1995) 3rd Edition]'.

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:

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Empirical Formula & 12MoO3.H3PO4.xH2O

Structural Formula

...End Of MSDS...

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Print Date: 20/06/2019 CS: 172