Material Safety Data Sheet

1. IDENTIFICATION OF SUBSTANCE
Trade Name: Cyclosporin A
Product Number: 2002
Supplier: R&S Pharmchem Co., Ltd
          Rm# 601, #21 Dong, No.3468 Hunan Rd.
          Shanghai, China, 201315
Tel: +86-139-7799-6986
Fax: +86-21-5102-6644
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2. COMPOSITION/DATA ON COMPONENTS:
Synonyms : Cyclosporine
Formula : C_{62}H_{111}N_{11}O_{12}
Molecular Weight : 1,202,00 g/mol
CAS-No.: 59865-13-3

3. HAZARDS IDENTIFICATION:
Risk advice to man and the environment
May cause cancer. May impair fertility. Also harmful if swallowed.

4. FIRST AID MEASURES:
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES:
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.
6. ACCIDENTAL RELEASE MEASURES:

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE:

Handling
Avoid exposure - obtain special instructions before use. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Personal protective equipment as follows:

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Eye protection
Safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
9. PHYSICAL AND CHEMICAL PROPERTIES:
Appearance
Form: powder
Colour: white
Safety data
pH: no data available
Melting point: no data available
Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Solubility:
Soluble in methanol, ethanol, acetone, ethyl acetate, chloroform, diethyl ether; slightly soluble in hexane, petroleum ether; insoluble in water.

10. STABILITY AND REACTIVITY:
Storage stability
Stable under recommended storage conditions.
Conditions to avoid
Heat.
Materials to avoid
Alkali metals, Aluminum, Strong oxidizing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions.
Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION:
Acute toxicity
LD50 Oral - rat - 1.480 mg/kg
Remarks: Behavioral:Muscle contraction or spasticity. Diarrhoea Skin and Appendages: Other: Hair.
Irritation and corrosion
no data available
Sensitisation
no data available
Chronic exposure
May cause reproductive disorders.
Signs and Symptoms of Exposure
Nausea, Vomiting, Tremors, Diarrhoea, elevated blood pressure, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Potential Health Effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion Harmful if swallowed.
Target Organs Immune system., Kidney, Liver, Blood
12. **ECOLOGICAL INFORMATION:**
Elimination information (persistence and degradability)
no data available
Ecotoxicity effects
no data available
Further information on ecology
no data available

13. **DEPOSAL CONSIDERATION:**
Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging
Dispose of as unused product.

14. **TRANSPORT INFORMATION:**
ADR/RID
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

15. **REGULATIONS:**
Labelling according to EC Directives
Hazard symbols
T  Toxic
R-phrase(s)
R45  May cause cancer.
R60  May impair fertility.
R22  Also harmful if swallowed.
S-phrase(s)
S53  Avoid exposure - obtain special instructions before use.
S45  In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Caution - substance not yet tested completely.
Restricted to professional users.

16. **OTHER INFORMATION:**
The above information is believed to be correct based on our present knowledge but does not purport to complete. For research use, only by trained personnel. The burden of safe use of this material rests entirely with user.
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