



Page 1/5 Printing date 09/14/2016 Revision date 09/13/2016

#### 1 Identification

Product identifier

Product name: Cyclosporin A

Stock number: J63191

**CAS Number:** 59865-13-3

**EC number:** 611-907-1

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Details of the supplier of the safety da Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

Email: tech@alfa.com www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

#### 2 Hazard(s) identification

## Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS08 Health hazard

H350 May cause cancer. Carc. 1A

Repr. 1A H360 May damage fertility or the unborn child.



GHS07

Acute Tox. 4 H302 Harmful if swallowed. Hazards not otherwise classified No information known.

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms







**Signal word** Danger **Hazard statements** H302 Harmful if swallowed.

H32a'd Statements
H350 May cause cancer.
H360 May cause cancer.
H360 May damage fertility or the unborn child.
Precautionary statements
P201 Obtain special instructions before use.
P281 Use personal protective equipment as required.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P301 Rinse mouth.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS classification
D2A - Very toxic material causing other toxic effects



# Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 2
Flammability = 1
Physical Hazard = 1

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

# 3 Composition/information on ingredients

Chemical characterization: Substances

Cheffical characterization
CAS# Description:
59865-13-3 Cyclosporin A
Identification number(s):
EC number: 611-907-1

#### Product name: Cyclosporin A

(Contd. of page 1)

#### 4 First-aid measures

Description of first aid measures After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing Seek medical treatment.
Information for doctor
Meet important symptoms and effects, both acute and delayed.

Most important symptoms and effects, both acute and delayed Harmful if swallowed.

May cause cancer. Suspected of causing cancer by inhalation. May damage fertility or the unborn child. **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### 5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOX)
Advice for firefighters

Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

#### 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Ensure adequate ventilation
Environmental precautions: Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13.

Prevention of secondary hazards: No special measures required.

Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

### 7 Handling and storage

Handling Precautions for safe handling

Precautions for sare nandling
Keep container tightly sealed.
Ensure good ventilation at the workplace.
Open and handle container with care.
Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: Store in freezer (-20°C). Information about storage in one common storage facility:

Protect from heat.

Store away from oxidizing agents.

Further information about storage conditions: Keep container tightly sealed.

Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: No data

Exposure controls Personal protective equipment

Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Recommended filter device for short term use:
Use a respirator with type P100 (USA) or P3 (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protection of hands:
Impervious gloves

Protection of nands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Material of gloves Nitrile rubber, NBR
Penetration time of glove material (in minutes) 480
Glove thickness 0.11 mm
Eye protection: Safety glasses

(Contd. on page 3)

Product name: Cyclosporin A

Body protection: Protective work clothing.

(Contd. of page 2)

#### 9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Appearance: Form:

Crvstalline Not determined

Odor: Odor threshold: pH-value:

Not determined Not applicable

146-151 °C (295-304 °F) Not determined Not determined

Change in condition
Melting point/Melting range:
Boiling point/Boiling range:
Sublimation temperature / start:
Flammability (solid, gaseous)
Ignition temperature:
Decomposition temperature:
Auto igniting:

Not determined Not determined Not determined Not determined

Not determined.

Auto igniting: Danger of explosion: Explosion limits:

Lower: Upper: Vapor pressure: Not determined Not determined Not applicable. Not determined Not determined. Density: Relative density Vapor density Evaporation rate Not applicable. Not applicable.

Solubility in / Miscibility with

Water: Not determined Partition coefficient (n-octanol/water): Not determined. Viscosity:

dynamic: kinematic: Not applicable.

Not applicable. No further relevant information available. Other information

#### 10 Stability and reactivity

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions Reacts with strong oxidizing agents

Conditions to avoid No further relevant information available.

Incompatible materials:

Oxidizing agents

Oxidizing agents Heat

Hazardous decomposition products:

Carbon monoxide and carbon dioxide Nitrogen oxides

## 11 Toxicological information

Information on toxicological effects

Acute toxicity: Harmful if swallowed. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification:

Oral LD50 1480 mg/kg (rat)

Skin irritation or corrosion: May cause irritation

Skin Inflation of Corrosion: May cause inflation

Sepsitization or corrosion: May cause irritation

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.

Carcinogenicity:

May cause cancer.
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.
NTP-K: Known to be carcinogenic: sufficient evidence from human studies.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.

Reproductive toxicity:
May damage fertility or the unborn child.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: No effects known.
Aspiration hazard: No effects known.
Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

## 12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.

Additional ecological information: General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Avoid transfer into the environment.

(Contd. on page 4)

(Contd. of page 3)

## Product name: Cyclosporin A

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

#### 13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

| 4 Trans | port in | formation |
|---------|---------|-----------|
|---------|---------|-----------|

**UN-Number** DOT, ADN, IMDG, IATA

UN proper shipping name DOT, ADN, IMDG, IATA

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA Class

Packing group DOT, IMDG, IATA

Environmental hazards:

Special precautions for user

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

DOT

Marine Pollutant (DOT):

UN "Model Regulation":

#### 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





GHS07 GHS08

Signal word Danger

Hazard statements H302 Harmful if swallowed.

H302 Harmful if swallowed.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
Precautionary statements
P201 Obtain special instructions before use.
P281 Use personal protective equipment as required.
Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P330 Rinse mouth.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if the lateral in the call and in th

P330 Rinse mouth.
P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P405 Store locked up.

Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

National regulations

All components of this product are listed on the Canadian Domestic Substances List (DSL).

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable.

No

# Prop 65 - Chemicals known to cause cancer

59865-13-3 Cyclosporin A

Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use:

For use only by technically qualified individuals.

For use only by technically qualified individuals.

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department Date of preparation / last revision 09/14/2016 / -

(Contd. on page 5)

## Product name: Cyclosporin A

(Contd. of page 4)

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
VPUS: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
ARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)
Acute Tox. 4: Acute Tox. 6: Acute Tox. 4: Acute Tox. 6: Acute Tox. 7: Acute Tox. 6: Acute Tox. 7: Acute Tox. 6: Acute Tox. 7: Acute Tox. 7: