

Safety Data Sheet acc. to OSHA HCS

Page 1/4 Printing date 08/24/2017 Revision date 08/23/2017 Version 2

1 Identification

Product identifier

Product name: Celatom® FW-14

Stock number: H31733 CAS Number: 68855-54-9 **EC** number: 272-489-0

Details of the supplier of the safety data sheet Manufacturer/Supplier:

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
Fmergency telephone number:

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

H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to the lung, the blood and the endocrine system through prolonged or repeated exposure. Route of exposure: Inhalation. Hazards not otherwise classified No information known.

Label elements

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

Hazard pictograms



GHS08

Signal word Warning
Hazard statements
H351 Suspected of causing cancer.
H351 Suspected of causing cancer.
H373 May cause damage to the lung, the blood and the endocrine system through prolonged or repeated exposure. Route of exposure: Inhalation.
Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves / protective clothing.
WHMIS classification
D2A Vege toxic material causing other toxic effects

D2A - Very toxic material causing other toxic effects



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



ALTH 2 Health (acute effects) = 2
Plammability = 0
Physical Hazard = 0

Other hazards

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

3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 68855-54-9 Celatom® FW-14 Concentration: ≤100% Identification number(s): EC number: 272-489-0

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 souts and delayed.

Most important symptoms and effects, both acute and delayed Suspected of causing cancer.

(Contd. on page 2)

Product name: Celatom® FW-14

May cause damage to the lung, the blood and the endocrine system through prolonged or repeated exposure. Route of exposure: Inhalation. Indication of any immediate medical attention and special treatment needed No further relevant information available.

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5 Fire-fighting measures

Extinguishing media

Extinguishing media
Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Silicon oxide
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.

Protective Action Criteria for Chemicals

PAC-1: Substance is not listed

PAC-1: Substance is not listed PAC-2: Substance is not listed

PAC-3: Substance is not listed.

7 Handling and storage

Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Prevent formation of dust.
Information about protection against explosions and fires: The product is not flammable

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. **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:

68855-54-9 Celatom® FW-14 (100.0%)

TLV (Canada) Long-term value: 10 mg/m³

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.
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 N95 (USA) or PE (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

Impervious gloves
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 with side shields / NIOSH (US) or EN 166(EU) Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Form:

Odor: Odor threshold:

Powder Odorless Not determined.

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(Contd. of page 2)

Product name: Celatom® FW-14 pH-value: Not applicable.

Change in condition Change in condition
Melting point/Melting range:
Boiling point/Boiling range:
Sublimation temperature / start:
Flammability (solid, gaseous)
Ignition temperature:
Decomposition temperature:
Auto institue: Not determined Not determined Not determined Not determined Not determined Not determined

Auto igniting: Not determined. Danger of explosion: Explosion limits: Lower: Upper: Not determined. Not determined

Not determined Vapor pressure: Density: Relative density Vapor density Not applicable. Not determined Not determined. Not applicable. Evaporation rate Solubility in / Miscibility with Not applicable.

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

dynamic: kinematic: Other information Not applicable. Not applicable. No further relevant information available.

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
Hazardous decomposition products: Silicon oxide

11 Toxicological information

Information on toxicological effects

Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: Suspected of causing cancer.

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: May cause damage to the lung, the blood and the endocrine system through prolonged or repeated exposure. Route of exposure: Inhalation.

Not applicable

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Aspiration in azard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

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:

General notes:
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.
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.

14 Transport information

UN-Number DOT, ADN, IMDG, IATA Not applicable UN proper shipping name DOT, ADR, ADN, IMDG, IATA

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Not applicable Class

(Contd. on page 4)

Version 2 Product name: Celatom® FW-14 (Contd. of page 3) Packing group DOT, ADR, IMDG, IATA Not applicable Environmental hazards: Not applicable Special precautions for user Not applicable Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable Transport/Additional information: DOT Marine Pollutant (DOT): No UN "Model Regulation": Not applicable

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



Signal word Warning Hazard statements

H351 Suspected of causing cancer.
H373 May cause damage to the lung, the blood and the endocrine system through prolonged or repeated exposure. Route of exposure: Inhalation.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves / protective clothing.
National regulations

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).
SARA Section 313 (specific toxic chemical listings) Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.
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.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use: For use only by technically qualified individuals.
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. 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.

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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this 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/Revision: Print date, revision date and version number are in the header of each page.

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)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal dose, 50 percent
LD50: Lethal dose, 50 percent
LD50: Substances of Very High Concern
PVB: very Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
PVB: 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)
Carc. 2: Carcinogenicity — Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) — Category 2

USA