

SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878

FLOIXEM® CS-R

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier FLOIXEM® CS-R

UFI: QD05-T8DW-MPKY-2DM7

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

Identified use(s): Cleaner for water – glycol circuits. Ready to use. Specifically for solar energy systems.

Uses advised against: The product must not be used in ways other than those mentioned in section 1.

1.3. Details of the supplier of the safety data sheet

Company: SUCESORES DE CARMELO PÉREZ MARTÍNEZ

Address: CALLE DEL TITANIO 15, POL.IND. PTR

Population: 50720 – CARTUJA BAJA

Province: ZARAGOZA (SPAIN)

Phone: +34 634119130

E-mail: floixem@floixem.comWebsite: www.floixem.com

1.4. Emergency telephone number (24 h) INFOTRAC 1-352-323-3500 (International)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP):

Not classified.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP):

Not applicable labelling.

2.3. Other hazards

The product contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

The product does not contain endocrine disrupting components that have an effect on human health.

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FLOIXEM® CS-R**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

Not applicable.

3.2. Mixtures**Chemical description:** Various product/s**Components:**

According to Annex II of Regulation (EC) No. 1907/2006 (point 3), the product does not present substances relevant to its classification.

SECTION 4. FIRST AID MEASURES**4.1. Description of first aid**

The symptoms of intoxication can appear with at later than the exposition; therefore, in case of doubt, of direct exposure to the product or if feeling unwell, ask for medical attention showing the MSDS of this product.

If inhaled:

Remove the person affected from the place of exposure, provide clean air and have them rest. In serious cases, such as cardiorespiratory arrest, techniques of artificial respiration must be applied (rescue breathing, cardiac massage, oxygen supply, etc.), which require immediate medical attention.

On skin contact:

Remove contaminated clothing and shoes, clean the affected area with water and neutral soap. In case of serious illness, seek medical attention. If the product causes burns, clothing should not be removed, as it could worsen the injury if stuck to the skin. If blisters appear, do not burst them, as it could increase the risk of infection.

On eye contact:

Rinse eyes with plenty of water at room temperature for at least 15 minutes. Avoid rubbing of closing the eyes. If wearing contact lenses, remove it if they are not stuck to the eyes, as it could lead to worse damages. In any case, after washing, a medical professional should be contacted with the Product Safety Data Sheet.

On accidental ingestion/inhalation:

Do not induce vomiting. In case of vomit, keep the head tilted forwards to avoid inhaling. Have the victim rest. In case of unconsciousness, administer nothing orally until medical supervision. Rinse your mouth and throat, as they may have been affected by the ingestion.

4.2. Most important symptoms and effects, both acute and delayed

The acute and delayed effects are those indicated in sections 2 and 11.

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FLOIXEM® CS-R**4.3. Indication any medical attention and special treatments that should be dispensed immediately**

Symptomatic treatment.

SECTION 5. FIRE FIGHTING MEASURES**5.1. Extinguishing media****Suitable extinguishing media:**

The product is not flammable under normal conditions of storage, handling and use. In case of ignition due to improper handling, storage or use, preferably use multi-purpose powder extinguishers (ABC powder), water spray, carbon dioxide or foam according to local laws.

Unsuitable extinguishing media:

Not relevant.

5.2. Specific hazards arising from the substance or mixture

As a consequence of combustion or thermal decomposition, reaction subproducts are generated, which can be toxic and, therefore, entail a health risk.

5.3. Advise for fire-fighters

Depending on the magnitude of the fire, it could be necessary the use of full protective clothing and a self-contained breathing apparatus. A minimum of emergency installations or response elements (fire blankets, first-aid kit, etc.) should be ready according to local laws.

Additional provisions:

Act according to the Site Emergency Plan and the Fact Sheets about response to accidents and other emergencies. Eliminate any ignition source. In case of fire, refrigerate the containers and storing tanks of products which could ignite, explode or BLEVE as a consequence of high temperatures. Avoid spilling into the aquatic environment the products used for fire extinguishing

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures.****For non-emergency services personnel:**

Isolate leaks when it does not entail an additional risk for the persons doing the task. When exposed to a potential product spill, the use of personal protection elements is mandatory (see section 8). Evacuate the area and keep unprotected persons away.

For emergency personnel:

Always wear protection equipment. Keep unprotected persons away. See section 8.

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FLOIXEM® CS-R**6.2. Precautions related to the environment**

Product not classified as dangerous for the environment. Keep the product away from drains and surface or underground waters.

6.3. Methods and material for containment and cleaning up

Recommendations:

Absorb spillages with sand or inert absorbent and transfer to a safe place. It is not absorbed in sawdust or other combustible absorbents. See also section 13 for any consult regarding disposing.

6.4. Referenceto other sections

See also sections 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling****A.- General precautions**

Comply with current legislation on occupational risk prevention in terms of manual handling of loads and chemical products. Keep containers hermetically sealed. Avoid free spillage from the container. Maintain order, cleanliness and disposal by safe methods (section 6).

B.- Technical recommendations for fires and explosions prevention

Non-flammable product under normal conditions of storage, handling and use. Transfer at slow speeds is recommended to avoid generation of electrostatic charges that may affect flammable products. See section 10 for conditions and materials to avoid.

C.- Technical recommendations for ergonomic and toxicological risk prevention

For exposure control, see section 8. Do not eat, drink or smoke in working areas; wash hands after each use and remove contaminated clothes and protection equipment before entering eating areas.

D.- Technical recommendations for environmental risk prevention

It is recommended to have material for containment and cleanup around the product (see section 6.3).

7.2. Conditions for safe storage, including any incompatibilities**A.- Technical storing measures**

Minimum temperature: 5°C
Maximum temperature: 30°C
Maximum time: 36 months

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B.- General storing conditions

keep in tightly closed original containers, in case of transfer make sure that the material of the container is compatible with the product, recommended materials: HDPE, PP, INOX 304, INOX 316.

Avoid direct sunlight, heat sources, radiations, static electricity and contact with food. See section 10.4 and 10.5 for more information.

7.3. Specific final uses

Except for the specified instructions, there is no other necessary recommendation regarding the uses of this product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Substances whose occupational exposure limit values must be monitored in the workplace:

DNEL (Worker) Not relevant

DNEL (General Population) Not relevant

PNEC Not relevant

8.2. Exposure controls**A.- Safety and hygiene measures in the working environment**

In accordance with the priority order for occupational exposure control the localized extraction of the working area is recommended as a collective protection measure to avoid exceeding occupational exposure limits. If personal protective equipment is used, it should have the CE marking in accordance with current legislation. For more information regarding personal protective equipment (storage, use, cleaning, type of protection, etc.), see the information leaflet provided by the manufacturer. The instructions detailed in this point refer to pure product. Safety measures for diluted product may vary depending on the degree of dilution, use, application method, etc. In order to determine the obligation to install emergency showers and/or eyebath in warehouses, regulations referring to storage of chemical products should be followed. For more information, see points 7.1 and 7.2.

This information is a recommendation. Risk prevention services should correct the information, it is unknown if the company has additional prevention measures or if they have been included in the appropriate risk evaluation.

B.- Respiratory protection

In case of high vapour concentrations or if occupational exposure limits are exceeded (see section 8.1), wear a respiratory protective mask with filter for organic vapours (EN 136/140/141/145/143/149). Under normal conditions, respiratory protection is not required.

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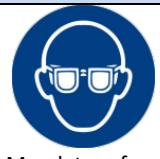
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C.- Specific hand protection

Pictogram	Personal Protection Equipment	Marking	CEN standards	Notes
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III gloves is recommended according to the regulations EN ISO 21420 and EN ISO 374-1

D.- Eye/face protection

Pictogram	Personal Protection Equipment	Marking	CEN standards	Notes
 Mandatory face protection	Panoramic goggles against splash and/or projections		EN 166 EN ISO 4007	Clean daily and sanitize periodically according to the instructions of the manufacturer. Recommended in case of splashing risk.

E.- Body protection

Pictogram	Personal Protection Equipment	Marking	CEN standards	Notes
	Work clothes		EN ISO 13034	Replace when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III is recommended according to the regulations EN ISO 6529, EN ISO 6530, EN ISO 13688, EN 464
	Non slip footwear		EN ISO 20347	Replace when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III is recommended according to the regulations EN ISO 20345y EN 13832-1

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F. – Complementary emergency measures

Emergency Measure	Standards	Emergency Measure	Standards
 emergency shower	ANSI Z358-1 ISO 3864-1 ISO 3864-4	 Eyewash	DIN 12 899 ISO 3864-1 ISO 3864-4

Environmental exposure controls:

In accordance with the European legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see section 7.1.D.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

See the product's technical datasheet/specifications sheet for more information.

Physical state at 20 °C:

Aspect:	Liquid
Color:	Transparent fluid
Odor:	Green
Odor threshold:	Weak, characteristic
	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	>100°C
Vapor pressure at 20 °C:	0.1 mbar at 20°C
Vapor pressure at 50 °C:	Not relevant *
Evaporation rate at 20 °C:	Not relevant *

Characterization of the product:

Density at 20 °C:	1.025-1.035 g/cc
Relative density at 20 °C:	Not relevant *
Dynamic viscosity at 20 °C:	Not relevant *
Cinematic viscosity at 20 °C:	Not relevant *
Cinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	approx. 6,5
Vapor density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water at 20 °C:	Not relevant *
Solubility in water at 20 °C:	Unlimited

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Solubility property:	Soluble in polar solvents
Decomposition temperature:	Not relevant
Melting point/freezing point:	-approx. 0°C

Flammability:

Flash point:	>100°C
Flammability (solid, gas):	Not relevant *
Ignition temperature:	>400°C
Lower flammability limit:	Not relevant*
Upper flammability:	Not relevant

Explosiveness (Solid):

Lower explosive limit:	Not relevant *
Upper explosion limit:	Not relevant *

Characteristics of the particles:

Equivalent average diameter:	Not relevant *
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*Not relevant due to the nature of the product, not providing information characteristic of its danger.

9.2. Other information**Information about physical hazard types:**

Exploding properties:	Not relevant *
Comburent properties:	Not relevant *
Metal corrosion:	Not relevant *
Ignition heat:	Not relevant *
Aerosols-total percentage (in mass) of flammable components:	Not relevant *

Other security features:

Surface tension at 20 °C:	Not relevant *
Refractive index:	Not relevant *

Volatile organic compounds (VOC):	0%.
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*Not relevant due to the nature of the product, not providing information characteristic of its danger.

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

No hazardous reactions are expected if the technical storing instructions for chemical products are followed (see section 7).

10.2. Chemical stability

Stable under normal storing, handling and use conditions.

10.3. Possibility of dangerous reactions

Under the specified conditions, no hazardous reactions leading to excessive pressure or temperatures are expected.

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10.4. Conditions to avoid

Exposure to elevated temperatures may cause decomposition of the product. Gas generation during decomposition can cause pressure in closed systems.

For handling and storing at room temperature:

Impact and Friction	Contact with air	Heating	Sunlight
Not applicable	Not applicable	Not applicable	Avoid direct incidence

10.5. Incompatible materials

Acids, bases and oxidants	Water	Oxidizing materials	Combustible materials
Avoid strong acids, bases and oxidants	Not applicable	Avoid direct incidence	Not applicable

10.6. Hazardous decomposition products

Depending on the decomposition conditions, complex mixtures of chemical substances can be released as a consequence.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1. Information on the hazard classes defined in Regulation (EC) No 1272/2008****A.- Ingestion (acute effect):**

- Acute toxicity: According to the available data, the classification criteria are not met. For more information see section 3.
- Corrosivity/Irritability: According to the available data, the classification criteria are not met. For more information see section 3.

B.- Inhalation (acute effect):

- Acute toxicity: According to the available data, the classification criteria are not met. For more information see section 3.
- Corrosivity/Irritability: According to the available data, the classification criteria are not met. For more information see section 3.

C.- Contact with skin and eyes (acute effect):

- Contact with skin: According to the available data, the classification criteria are not met. For more information see section 3.
- Eye contact: According to the available data, the classification criteria are not met. For more information see section 3.

D.- CMR effects (carcinogenicity, mutagenicity and reproductive toxicity):

- Carcinogenicity: According to the available data, the classification criteria are not met. For more information see section 3. IARC: Not relevant

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- Mutagenicity: According to the available data, the classification criteria are not met. For more information see section 3.

- Reproductive toxicity: According to the available data, the classification criteria are not met. For more information see section 3.

E.- Sensitization effects:

- Respiratory: According to the available data, the classification criteria are not met, as it does not present substances classified as dangerous with sensitizing effects above the limits set out in point 3.2 of Regulation (EC) 2020/878. For more information see sections 2, 3 and 15.

- Cutaneous: According to the available data, the classification criteria are not met. For more information see section 3.

F.- Specific target organ toxicity (STOT)-single exposure:

According to the available data, the classification criteria are not met. For more information see section 3.

G.- Specific target organ toxicity (STOT)-repeated exposure:

-Toxicityspecific in certain organs (STOT)-repeated exposure: According to the available data, the classification criteria are not met. For more information see section 3.

- Skin: According to the available data, the classification criteria are not met. For more information see section 3.

H.- Danger due to aspiration:

According to the available data, the classification criteria are not met. For more information see section 3.

11.2. Information regarding other hazards

This product does not contain endocrine disrupting components that have effects on human health.

No information is available on other adverse health effects.

SECTION 12. ECOLOGICAL INFORMATION**12.1. Toxicity**

Based on the individual components, the material is not classified as harmful to aquatic organisms (LC50/EC50/IC50 greater than 100 mg/L in most sensitive species).

12.2. Persistence and degradability

Based on the individual components the material is readily biodegradable. Passes OECD tests for readily biodegradability. The material is ultimately biodegradable. It reaches more than 70% mineralization in OECD inherent biodegradability tests.

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12.3. Bioaccumulative potential

The estimated potential bioconcentration according to its individual components is low (BCF < 100 or Log Pow < 3).

12.4. Mobility on the ground

The mobility potential on the ground is very high (Poc between 0 and 50).

12.5. Results of PBT and vPvB assessment

The product does not contain components considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6. Endocrine disrupting properties

The product does not contain endocrine disrupting components that have an effect on the environment.

12.7. Other adverse effects

Not concerned by Regulation (EU) n° 2024/590 of the European Parliament and of the Council of 7 February 2024 on substances that deplete the ozone layer.

No information is available on other adverse effects on the environment.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1. Methods for waste treatment****Type of waste (Regulation (EU) No. 1357/2014):**

Code	Description	Waste type
-	-	Not hazardous

Waste management (disposal and recovery):

Consult the authorized waste manager about the operations of assessment and disposal in accordance with Annex I and Annex II (Directive 2008/98/EC). According to codes 15 01 (2014/955/EU), if the container has been in direct contact with the product, it will be processed in the same way as the product. If not, it will be processed as a non-hazardous waste. See point 6.2.

Legislative provisions related to waste management:

In accordance with Annex II of Regulation (EC) NO. 1907/2006 (REACH), these are the European provisions related to waste management: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) NO. 1357/2014.

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SECTION 14. TRANSPORT INFORMATION

Not classified as a dangerous good under transport regulations.

	ADR/RID	DNA	IMDG	IATA/ICAO
14.1. UN number or ID number	-	-	-	-
14.2. United Nations proper shipping name	-	-	-	-
14.3. Transport hazard class(es)	-	-	-	-
14.4. Packing group	-	-	-	-
14.5. Environmental hazards	-	-	-	-

14.6. Special precautions for users

See sections 6, 7 and 8.

14.7. Bulk maritime transport under IMO instruments

Not applicable

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations and legislation specific to the substance or mixture

- Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII of the REACH Regulation): Not relevant.
- List of substances subject to authorisation (Annex XIV of REACH Regulation): Not relevant.
- Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals: Not relevant.
- Regulation (EU) No 2019/1021 on persistent organic pollutants: Not relevant.
- Active substances which have been included in Article 95 of Regulation (EU) No. 528/2012: Not relevant.
- Regulation (EU) 2024/590 on substances that deplete the ozone layer: Not relevant.

Seveso III:

Not relevant

Specific provisions regarding the protection of people or the environment:

It is recommended to use the compiled information in this Safety Data Sheet as entry data for a risk evaluation of the local circumstances with the aim of establishing necessary measures to prevent handling, use, storage and disposal risks.

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Other legislations:

Regulation EC No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.

Regulation EC No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006 and subsequent amendments.

15.2. Chemical Safety Assessment

Chemical safety assessment has not been carried out.

SECTION 16. OTHER INFORMATION**Legislation applicable to safety data sheets:**

This Safety Data Sheet has been developed according to ANNEX II-Guide to the compilation of Safety Data Sheets of Regulation (EC) NO. 1907/2006 (REGULATION (EU) 2020/878 OF THE COMMISSION).

Modifications with respect to the previous safety sheet that affect risk management measures:

Not relevant

Texts of the legislative phrases referred to in section 2:

Not relevant

Texts of the legislative phrases contemplated in section 3:

Not relevant

Regulation nº1272/2008 (CLP):

Not relevant

Tips regarding training:

A minimum of occupational risk prevention training for the personnel handling this product is recommended in order to ease the comprehension and interpretation of this Safety Data Sheet and the labeling of the product.

Main bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

SDS: Safety Data Sheet

CAS: Chemical Abstracts Service – Division of the American Chemical Society

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vPvB: Very persistent/very bioaccumulative

PBT: Persistent/bioaccumulative/toxic

STOT: Specific target organ toxicity

BCF: Bioconcentration Factor

IARC: International Cancer Research Center

PNEC: Predicted No Effect Concentration: concentration of the substance for which no negative effects on environmental performance are expected.

REACH: Registration, evaluation, authorization and restriction of chemical substances

ADR: European Agreement Concerning the International Carriage of Goods by Road

RID: European Agreement Concerning the International Carriage of Dangerous Goods by Rail

ADN: European agreement on the international transport of dangerous goods by inland waterways

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization