

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
Version 1.1

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

Product identifiers

Product name: **Solubilization and stabilization screening KIT**
Synonym: **CALIXAR™ Screening Kit**
Product Number: CALIXAR-K1
CAS Number: none
EINECS Number: none

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

For scientific research and development use only

Details of the supplier of the safety data sheet

Company: CALIXAR SAS
Bâtiment Laennec
60 avenue Rockefeller
69008 LYON
FRANCE
Telephone: +33 (0)4 81 07 64 60
E-mail address: contact@calixar.com

Emergency telephone number

Emergency Phone #: INRS +33 (0)1 45 42 59 59

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Irritating to eyes, respiratory system, and skin.

Label elements:

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal word:

Warning

Hazard statement(s):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s):

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

Supplemental Hazard:

none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s):



Xi - Irritant

R-phrase(s):

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s):

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances

Designation

- **CALX8:** 5,11,17-tris[(carboxy)methyl]-25-monooctyloxy-26,27,28-trihydroxycalix[4]arene
Chemical formula: $C_{42}H_{43}Na_3O_{10}$
Molecular Weight: 776.7 g.mol^{-1}
- **DDTAC:** Dodecylmercapto-S-(poly(tris(hydroxymethyl)acrylamidomethane) DPn=6
Chemical formula: $C_{54}H_{104}SO_{24}N_6$
Molecular Weight: 1254 g.mol^{-1}
- **DDG:** N-(2-methyl-1,3-bis(O-β-D-Glucose)propan-2-yl)-3-(decylthio)propanamide
Chemical formula: $C_{29}H_{55}NO_{11}S$
Molecular Weight: 657.8 g.mol^{-1}
- **DLAC:** N-decylamine lactobionamide
Chemical formula : $C_{22}H_{43}NO_{11}$
Molecular Weight : 497.6 g.mol^{-1}
- **FLAC6:** N-(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononylamine) lactobionamide
Chemical formula : $C_{21}H_{28}F_{13}NO_{11}$
Molecular Weight : 717.4 g.mol^{-1}
- **FTAC6:** S-(poly(tris(hydroxymethyl)acrylamidomethane)-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorothiooctyl) DPn=6
Chemical formula : n.a.
Molecular Weight : $\approx 1400 \text{ g.mol}^{-1}$
- **FTAC8:** S-(poly(tris(hydroxymethyl)acrylamidomethane)-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorothiododecyl) DPn=12
Chemical formula: n.a.
Molecular Weight: $\approx 2500 \text{ g.mol}^{-1}$

- **DDLAC:** N-dodecylamine lactobionamide
Chemical formula: C₂₄H₄₇NO₁₁
Molecular Weight: 525.6 g.mol⁻¹
- **CALXCHOL:** 5,11,17-tris[(carboxy)methyl]-25-monomethoxytriazolo-(3 α -cholesteryl)-26,27,28-trihydroxycalix[4]arene
Chemical formula : C₆₄H₇₄N₃Na₃O₁₀
Molecular Weight : 1114.2 g.mol⁻¹
- **CALXGLUK:** 5,11,17-tris{2-[4-(β -D-glucopyranosyl)-1H-1,2,3-triazol-1-yl]ethyl}-25-monoheptoxy-26,27,28-trimethoxycalix[4]arene
Chemical formula: C₇₁H₉₅N₉O₂₂
Molecular Weight: 1426.5 g.mol⁻¹

4. FIRST AID MEASURES

Description of 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

Extinguishing media:

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Special hazards arising from the substance or mixture

Can be released in case of fire carbon oxides (CO, CO₂)

Precautions for fire-fighters

Wear full protective suit.

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

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

Reference to other sections

For information on safe handling see section 7

For information on personal protection equipment see section 8

For information on disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Do not swallow dust or powder. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

Store in cool place for up to one year, out of direct light. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive. Store away from oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form:	powder
Colour:	withe to beige
Odour:	none
Odour Threshold:	no data available
pH (1% solution):	no data available

Change in condition:

Melting point/range:	no data available
Boiling point/range:	no data available
Sublimation temperature/start:	no data available
Flash point:	not applicable
Inflammability (solid, gas):	no data available
Ignition temperature:	no data available
Decomposition temperature:	no data available
Auto-ignition temperature:	no data available

Explosive properties:	product is not explosive
Upper/lower explosive limits:	no data available
Vapour pressure:	not applicable
Density:	no data available
Relative density:	no data available
Vapour density:	not applicable
Evaporation rate:	not applicable
Solubility in water:	not applicable
Partition coefficient (n-octanol/water):	no data available
Viscosity:	not applicable
Oxidizing properties:	no data available

Other safety information

No further relevant information available

10. STABILITY AND REACTIVITY

Reactivity

no data available

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

no data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes serious eye irritation.

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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

UN-Number : ADR/RID: none

IMDG: none

IATA: none

UN proper shipping name:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es): ADR/RID: none

IMDG: none

IATA: none

Packaging group: ADR/RID: none

IMDG: none

IATA: none

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special precautions for users

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product about appropriate safety precautions. It does not represent any guarantee of the properties of the product. CALIXAR company shall not be held liable for any damage resulting from handling or from contact with the above product.