

previous revision date : 2022/12/29

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name : CERAN FG

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

Identified uses
Industrial Grease

### 1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants  
562 Avenue du Parc de L'île  
92029 Nanterre Cedex FRANCE  
Tél: +33 (0)1 41 35 40 00  
Fax: +33 (0)1 41 35 84 71  
rm.msds-lubs@totalenergies.com

TotalEnergies Marketing Deutschland GmbH  
Jean-Monnet-Straße 2  
10557 BERLIN  
DEUTSCHLAND  
Tel: +49 (0)30 2027 60

msds@totalenergies.com

### Contact

HSE : + 49 (0) 30/ 2027-9429

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

Telephone number : Giftnotruf Berlin, Tel.+49 (0)30 19240 (24 h erreichbar, Beratung in Deutsch und Englisch)

#### Supplier

Telephone number : TOTAL Emergency number: +49 89 220 61012

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

## 2.2 Label elements

<b>Signal word</b>	: No signal word.
<b>Hazard statements</b>	: No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>	
<b>Prevention</b>	: Not applicable.
<b>Response</b>	: Not applicable.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Supplemental label elements</b>	: Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts and Sulfonic acids, petroleum, calcium salts. May produce an allergic reaction. Safety data sheet available on request.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Not applicable.

## 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration  $\geq 0,1$  %.

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/substance	Identifiers	% (w/w)	Classification	Specific Conc. Limits, M-factors and ATEs	Type
White mineral oil (petroleum)	REACH #: 01-2119487078-27 EC: 232-455-8 CAS: 8042-47-5	$\geq 50$ - $\leq 75$	Asp. Tox. 1, H304	-	[1] [2]
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	REACH #: 01-2119492616-28 EC: 274-263-7 CAS: 70024-69-0	$\leq 10$	Skin Sens. 1B, H317	-	[1]
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	REACH #: 01-2119492627-25 EC: 271-529-4 CAS: 68584-23-6	$\leq 10$	Skin Sens. 1B, H317	Skin Sens. 1B, H317: C $\geq 10\%$	[1]
Sulfonic acids, petroleum, calcium salts	REACH #: 01-2119488992-18 EC: 263-093-9 CAS: 61789-86-4	$\leq 10$	Skin Sens. 1, H317	Skin Sens. 1, H317: C $\geq 10\%$	[1] [2]
calcium	EC: 247-557-8	$\leq 3$	Skin Irrit. 2, H315	-	[1]

dodecylbenzenesulphonate	CAS: 26264-06-2		Eye Dam. 1, H318		
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	REACH #: 01-2119491299-23 EC: 270-128-1 CAS: 68411-46-1	<3	Repr. 2, H361f Aquatic Chronic 3, H412  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

**Additional information** : Mineral oil of petroleum origin. Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : ☒ Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture** : ☒ No specific fire or explosion hazard.

**Hazardous combustion products** : carbon monoxide  
carbon dioxide  
nitrogen oxides  
sulfur oxides  
Hydrogen sulfide  
Mercaptans

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

**Small spill** : ☒ Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : ☒ Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Protective measures** : Pregnant women should strictly avoid inhalation or skin contact.  
Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/substance	Exposure limit values
White mineral oil (petroleum)	<b>TRGS 900 OEL (Germany, 6/2022).</b> PEAK: 20 mg/m <sup>3</sup> 15 minutes. Form: alveolar fraction TWA: 5 mg/m <sup>3</sup> 8 hours. Form: alveolar fraction <b>DFG MAK-values list (Germany, 7/2022).</b> PEAK: 20 mg/m <sup>3</sup> , 4 times per shift, 15 minutes. Form: respirable fraction TWA: 5 mg/m <sup>3</sup> 8 hours. Form: respirable fraction
Sulfonic acids, petroleum, calcium salts	<b>TRGS 900 OEL (Germany, 6/2022).</b> PEAK: 20 mg/m <sup>3</sup> 15 minutes. Form: alveolar fraction TWA: 5 mg/m <sup>3</sup> 8 hours. Form: alveolar fraction <b>DFG MAK-values list (Germany, 7/2022).</b> PEAK: 20 mg/m <sup>3</sup> , 4 times per shift, 15 minutes. Form: respirable fraction TWA: 5 mg/m <sup>3</sup> 8 hours. Form: respirable fraction

**Reportable hazardous constituent(s) contained in UVCB and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)**

No exposure limit value known.

#### Biological Limit Values (BLV)

No exposure indices known.



**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following:  
 European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Advisory OEL** : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)

**DNELs/DMELs**

Product/substance	Type	Exposure	Value	Population	Effects
White mineral oil (petroleum)	DNEL	Long term Dermal	220 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	160 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	92 mg/kg	General population	Systemic
	DNEL	Long term Inhalation	35 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	40 mg/kg	General population	Systemic
	DNEL	Long term Oral	25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	34.78 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	93.02 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	164.56 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	217.05 mg/kg bw/day	Workers	Systemic
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	DNEL	Long term Dermal	0.513 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Oral	0.8333 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.03 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	1.667 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.9 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	3.33 mg/kg bw/day	Workers	Systemic
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	DNEL	Long term Inhalation	11.75 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	0.513 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Oral	0.8333 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.03 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	1.667 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.9 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	3.33 mg/kg bw/day	Workers	Systemic



Sulfonic acids, petroleum, calcium salts	DNEL	Long term Inhalation	11.75 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	1.03 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	0.513 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	0.513 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Oral	0.8333 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.03 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	1.667 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.9 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	3.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	11.75 mg/m <sup>3</sup>	Workers	Systemic
calcium dodecylbenzenesulphonate	DNEL	Short term Dermal	0.787 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	0.787 mg/cm <sup>2</sup>	General population	Local
	DNEL	Short term Dermal	1.57 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	1.57 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Short term Oral	13 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	13 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	26 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	26 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	26 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	28.6 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	52 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	52 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	52 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	52 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	57.2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	80 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	310 µg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	440 µg/kg bw/day	Workers	Systemic
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	DNEL	Long term	80 µg/m <sup>3</sup>	General	Systemic





**TotalEnergies**

# CERAN FG

SDS # : 33111

	DNEL	Inhalation	220 µg/kg bw/day	population General	Systemic
	DNEL	Long term Dermal	50 µg/kg bw/day	population General	Systemic
	DNEL	Long term Oral	0.04 mg/kg bw/day	population General	Systemic
	DNEL	Long term Oral	0.04 mg/kg bw/day	population General	Systemic
	DNEL	Long term Dermal	0.04 mg/kg bw/day	population General	Systemic
	DNEL	Long term Dermal	0.08 mg/kg bw/day	population Workers	Systemic
	DNEL	Long term Inhalation	0.14 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	0.6 mg/m³	Workers	Systemic

## PNECs

Product/ingredient name	Compartment Detail	Name	Method Detail
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Fresh water	1 mg/l	-
	Marine water	1 mg/l	-
	Fresh water sediment	226000000 mg/kg dwt	-
	Marine water sediment	226000000 mg/kg dwt	-
	Soil	271000000 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
	Secondary Poisoning	16.667 mg/kg dwt	-
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Fresh water	1 mg/l	-
	Marine water	1 mg/l	-
	Fresh water sediment	226000000 mg/kg dwt	-
	Marine water sediment	226000000 mg/kg dwt	-
	Soil	868700000 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
	Secondary Poisoning	16.667 mg/kg dwt	-
Sulfonic acids, petroleum, calcium salts	Fresh water	1 mg/l	-
	Marine water	1 mg/l	-
	Fresh water sediment	226000000 mg/kg dwt	-
	Marine water sediment	226000000 mg/kg dwt	-
	Soil	271000000 mg/kg wwt	-
	Sewage Treatment Plant	1000 mg/l	-
	Secondary Poisoning	16.667 mg/kg dwt	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Fresh water	33.8 µg/l	-
	Marine water	3.38 µg/l	-
	Fresh water sediment	446 µg/kg dwt	-
	Marine water sediment	44.6 µg/kg dwt	-
	Soil	17.6 mg/kg dwt	-
	Sewage Treatment Plant	10 mg/l	-
	Secondary Poisoning	16.667 mg/kg dwt	-



	Secondary Poisoning	883 µg/kg dwt	-
--	---------------------	---------------	---

## 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : In case of contact through splashing: safety glasses with side-shields, EN 166.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hydrocarbon-proof gloves

nitrile rubber

Fluorinated rubber

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

In case of prolonged contact with the product, it is recommended to wear gloves complying with ISO 21420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Non-skid safety shoes or boots

**Respiratory protection** : None under normal use conditions. If these are not sufficient to maintain exposure below the OEL, suitable respiratory protection must be worn (Type A/P1).

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Solid. [Paste.]

**Color** : Tan.

**Odor** : Mild. Hydrocarbon-like

**pH** : Not applicable. Product is non-soluble (in water).

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** : Not available.



Flash point	: Open cup: >180°C [Cleveland Open Cup (COC)]
Flammability	: Not applicable.
Lower and upper explosion limit	: <input checked="" type="checkbox"/> Not applicable.
Vapor pressure	: <input checked="" type="checkbox"/> 0.00008 kPa
Vapor density	: <input checked="" type="checkbox"/> Not applicable.
Relative density	: 0.95 to 1.05 [ISO 12185]
Density	: 0.95 to 1.05 g/cm <sup>3</sup> [25°C] [ISO 12185]
Solubility(ies)	:

Media	Result
water	Not soluble

Miscible with water	: No.
Partition coefficient: n-octanol/ water	: Not applicable.
Auto-ignition temperature	: <input checked="" type="checkbox"/> Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C): Not applicable.
<u>Particle characteristics</u>	
Median particle size	: <input checked="" type="checkbox"/> Not available.

## 9.2 Other information

No other relevant physical and chemical parameters for the safe use of the product

## SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: <input checked="" type="checkbox"/> No specific data.
10.5 Incompatible materials	: <input checked="" type="checkbox"/> Strong oxidizing agents strong acids Strong bases
10.6 Hazardous decomposition products	: carbon monoxide carbon dioxide nitrogen oxides sulfur oxides Hydrogen sulfide Mercaptans

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
White mineral oil (petroleum)	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LC50 Inhalation Dusts and mists	Rat - Male, Female	>1.9 mg/l	4 hours	EPA OPP 81-3 Acute Inhalation Toxicity Read across OECD 402
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	-
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	OECD 401
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	LC50 Inhalation Dusts and mists	Rat - Male, Female	>1.9 mg/l	4 hours	EPA OPP 81-3 Acute Inhalation Toxicity OECD
	LD50 Dermal	Rabbit - Male, Female	>4000 mg/kg	-	-
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	OECD 401 Read across EPA OPP 81-3 Acute Inhalation Toxicity
Sulfonic acids, petroleum, calcium salts	LC50 Inhalation Dusts and mists	Rat - Male	>1.9 mg/l	4 hours	EPA OPP 81-3 Acute Inhalation Toxicity
	LD50 Dermal	Rabbit - Male, Female	>4000 mg/kg	-	-
	LD50 Oral	Rat - Male	>16000 mg/kg	-	Section 772 . 112-21 CFR 40
calcium dodecylbenzenesulphonate	LD50 Dermal	Rabbit	4199 mg/kg	-	-
	LD50 Oral	Rat	4000 mg/kg	-	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	OECD 401

#### Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
calcium dodecylbenzenesulphonate	4000	4199	N/A	N/A	N/A

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### Irritation/Corrosion



Product/substance	Result	Species	Score	Exposure	Test
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Eyes - Cornea opacity	Rabbit	0	-	EPA
	Skin - Edema	Rabbit	0.3	4 hours	EPA OPPTS 870.2500 Acute Dermal Irritation
	Skin - Primary dermal irritation index (PDII)	Rabbit	0.5	4 hours	OECD
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Eyes - Cornea opacity	Rabbit	0	-	OECD 405
	Skin - Edema	Rabbit	0	4 hours	OECD 404

**Conclusion/Summary**

- Skin** : Based on available data, the classification criteria are not met.
- Eyes** : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required
- Respiratory** : Based on available data, the classification criteria are not met.

**Sensitization**

Product/substance	Route of exposure	Species	Result
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	skin	Mouse	Sensitizing
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	skin	Human	Sensitizing
Sulfonic acids, petroleum, calcium salts	skin	Guinea pig	Sensitizing
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	skin	Guinea pig	Not sensitizing

**Conclusion/Summary**

- Skin** : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required Contains sensitizer May produce an allergic reaction.
- Respiratory** : Based on available data, the classification criteria are not met.

**Mutagenicity**

Product/substance	Test	Experiment	Result
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative
	-	Experiment: In vivo	Negative



Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	OECD 487	Subject: Mammalian-Animal Experiment: In vitro	Negative
	OECD 476	Subject: Mammalian-Animal Cell: Somatic Experiment: In vitro	Negative
	OECD 473	Subject: Mammalian-Animal Cell: Somatic Experiment: In vitro	Negative
	OECD 478	Subject: Mammalian-Animal Cell: Somatic Experiment: In vivo	Negative
	OECD 471	Subject: Mammalian-Animal Subject: Bacteria	Negative

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Carcinogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Reproductive toxicity**

Product/substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Negative	Negative	Negative	Rat - Male, Female	Oral	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	-	Negative	Negative	Rat - Male, Female	Oral	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Teratogenicity**

Product/substance	Result	Species	Dose	Exposure
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Negative - Oral	Rat	150 mg/kg NOAEL	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Specific target organ toxicity (single exposure)**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Specific target organ toxicity (repeated exposure)**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Product/substance	Result
White mineral oil (petroleum)	ASPIRATION HAZARD - Category 1

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Information on the likely routes of exposure** : Not available.

#### **Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

## Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: No specific data.
<b>Inhalation</b>	: No specific data.
<b>Skin contact</b>	: Adverse symptoms may include the following: irritation dryness cracking
<b>Ingestion</b>	: No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

### Potential chronic health effects

Product/substance	Result	Species	Dose	Exposure
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Sub-acute NOAEL Dermal	Rat - Male, Female	>1000 mg/kg	-
	Sub-acute NOAEL Oral	Rat - Male, Female	500 mg/kg	-
	Sub-acute NOAEL Inhalation Vapor	Rat - Male, Female	50 mg/m <sup>3</sup>	28 days
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Sub-chronic LOAEL Oral	Rat - Male, Female	100 mg/kg	-

<b>Conclusion/Summary</b>	: Not available.
<b>General</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACh Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
White mineral oil (petroleum)	Acute EC50 >100 mg/l	Algae - <i>Pseudokirchnerella subcapitata</i>	48 hours	OECD 201
	Acute EC50 >100 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours	OECD 202
	Chronic NOEL >1000 mg/l	Fish - <i>Oncorhynchus mykiss</i>	21 days	-
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Acute EC50 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Acute EC50 >1000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 >1000 mg/l	Fish - <i>Cyprinodon variegatus</i>	96 hours	OECD 203
	Chronic EC10 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Acute EC50 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Acute EC50 >1000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 >1000 mg/l	Fish - <i>Cyprinodon variegatus</i>	96 hours	OECD 203
	Chronic EC10 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
Sulfonic acids, petroleum, calcium salts	Acute EC50 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Acute EC50 >1000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 >1000 mg/l	Fish - <i>Cyprinodon variegatus</i>	96 hours	OECD 203
	Chronic EC10 >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
calcium dodecylbenzenesulphonate	Acute EC50 2.5 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 22 mg/l	Fish	96 hours	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Acute EC50 >100 mg/l	Algae - <i>Desmodesmus subspicatus</i>	72 hours	OECD 201
	Acute EC50 51 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 >100 mg/l	Fish - <i>Danio rerio</i>	96 hours	OECD 203
	Fresh water			
	Chronic NOEC 10 mg/l	Algae - <i>Desmodesmus subspicatus</i>	72 hours	OECD 201
	Fresh water			
	Chronic NOEL 1.69 mg/l	Crustaceans - <i>Daphnia magna</i>	21 days	OECD 211
	Fresh water			

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability





Product/substance	Test	Result	Dose	Inoculum
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	OECD 301D	0 % - Not readily - 28 days	-	Activated sludge
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	OECD 301D	0 % - Not readily - 28 days	-	Activated sludge
Sulfonic acids, petroleum, calcium salts	OECD 301D	0 % - Not readily - 28 days	-	Activated sludge
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	OECD 301B	0 % - Not readily - 28 days	-	Activated sludge

**Conclusion/Summary** : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	-	-	Not readily
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	-	-	Not readily
Sulfonic acids, petroleum, calcium salts	-	-	Not readily
calcium dodecylbenzenesulphonate	-	-	Readily
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	-	-	Not readily

### 12.3 Bioaccumulative potential

Product/substance	LogK <sub>ow</sub>	BCF	Potential
White mineral oil (petroleum)	>6	-	High
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	22	-	High
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	6.7	1730	High

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**Mobility in soil** : Given its physical and chemical characteristics, the product has no soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration  $\geq 0,1$  %.

### 12.6 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

## 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. 12 01 12\*

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO/IATA
<b>14.1 UN number or ID number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-	-
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorization

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

#### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

##### Other EU regulations

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Industrial emissions** : Not listed  
(integrated pollution prevention and control) - Air

**Industrial emissions** : Not listed  
(integrated pollution prevention and control) - Water

**Explosive precursors** : Not applicable.

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Persistent Organic Pollutants

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

#### National regulations

**Storage class (TRGS 510)** : 12

#### Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

**Hazard class for water** : 2

**Technical instruction on air quality control** : TA-Luft Class I - Number 5.2.5: 87.2%  
TA-Luft Number 5.2.1: 9.9%  
TA-Luft Number 5.2.5: 2.9%

**Employment law** : Law on the protection of young workers  
Regulation on the complementary implementation of the EC Directive on Maternity Protection (MuSchRiv - Maternity Protection Directive Regulation)

#### International regulations

## Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

## Montreal Protocol

Not listed.

## Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## LU - Luxembourg prohibited chemicals in the workplace

Not listed.

## Inventory list

<b>Australia inventory (AIIIC)</b>	: All components are listed or exempted.
<b>Canada inventory (DSL/NDL)</b>	: All components are listed or exempted.
<b>China inventory (IECSC)</b>	: All components are listed or exempted.
<b>Europe inventory (EC)</b>	: All components are listed or exempted.
<b>Japan inventory</b>	: <b>Japan inventory (CSCL)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>	: All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	: All components are listed or exempted.
<b>Korea inventory (KECI)</b>	: All components are listed or exempted.
<b>Taiwan Chemical Substances Inventory (TCSI)</b>	: All components are listed or exempted.
<b>Thailand inventory</b>	: All components are listed or exempted.
<b>Turkey inventory</b>	: Not determined.
<b>United States inventory (TSCA 8b)</b>	: All components are listed or exempted.
<b>Vietnam inventory</b>	: All components are listed or exempted.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

**15.2 Chemical Safety Assessment** : Risk management measures and safety conditions of use are included in the relevant sections of the SDS

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ACGIH = American Conference of Governmental Industrial Hygienists
- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- DMEL = Derived Minimal Effect Level
- EL50 = median Effective Loading
- EUH statement = CLP-specific Hazard statement
- HSE = Health, Safety and Environment
- IDHL = Immediately dangerous to life or health

LC50 = Median lethal concentration  
 LD50 = Median lethal dose  
 LL50 = median Lethal Loading  
 N/A = Not available  
 NIOSH = National Institute of Occupational Safety and Health  
 NOAEL = No Observed Adverse Effect Level  
 NOEC No Observed Effect Concentration  
 OEL = Occupational Exposure Limit  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 QSAR = Quantitative Structure–Activity Relationship  
 REL = Recommended Exposure Limit  
 STEL = Short Term Exposure Limit  
 TLV = Threshold Limit Value  
 VOC = Volatile Organic Compound  
 vPvB = Very Persistent and Very Bioaccumulative  
 Unique Formula Identifier (UFI)  
 UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material

## **Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Classification	Justification
Not classified.	

## **Full text of abbreviated H statements**

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361f	Suspected of damaging fertility.
H412	Harmful to aquatic life with long lasting effects.

## **Full text of classifications [CLP/GHS]**

Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Repr. 2 Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1B	AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 TOXIC TO REPRODUCTION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1B
---	---

**Date of revision** : 2023/11/13  
**previous revision date** : 2022/12/29  
**Version** : 3



**TotalEnergies**

# CERAN FG

SDS # : 33111

## Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.