SAFETY DATA SHEET

according to regulation (EC) No. 1907/2006

SDS # : 080100

CERAN XM 220

Date of the previous version: 2017-10-31 **Revision Date:** 2018-06-15 **Version** 4

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name **CERAN XM 220 Number** 4KF **Substance/mixture** Mixture

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

Identified uses Lubricating grease.

1.3. Details of the supplier of the safety data sheet

Supplier

TOTAL LUBRIFIANTS
562 Avenue du Parc de L'ile
92029 Nanterre Cedex
FRANCE
Tél: +33 (0)1 41 35 40 00 Fax:
+33 (0)1 41 35 84 71***

Importer

Oil Intel Limited 56 Whakatu Road
Hastings 4172
NEW ZEALAND
Phone: +64 (06) 871 53 2
Fax: +64 (06) 870 48 90

For further information, please contact:

Contact Point HSE***

E-mail Address rm.msdslubs@total.com***

1.4. Emergency telephone number

Emergency telephone: +44 1235 239670
France - ORFILA (INRS) Tél : +33 (0)1 45 42 59 59 In
France - Poison centers: ANGERS : 02 41 48 21 21
BORDEAUX : 05 56 96 40 80
LILLE : 08 00 59 59 59
LYON : 04 72 11 69 11
MARSEILLE : 04 91 75 25 25
NANCY : 03 83 22 50 50
PARIS : 01 40 05 48 48
STRASBOURG : 03 88 37 37 37 TOULOUSE :
05 61 77 74 47

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008 ***

*For the full text of the H-Statements mentioned in this Section, see Section 2.2.****

Classification***

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008***

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008***

Signal word

None***

Hazard Statements *** None***

Precautionary Statements

None***

Supplemental Hazard Statements

EUH210 - Safety data sheet available on request***

EUH208 - Contains Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts, Sulfonic acids, petroleum, calcium salt, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, C14-16-18 Alkyl phenol. May produce an allergic reaction***

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.***

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture***

Chemical nature Mineral oil of petroleum origin.***

Hazardous ingredients ***

Chemical Name	EC-No	REACH registration No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts***	274-263-7***	01-2119492616-28	70024-69-0	5-<10	Skin Sens. 1B (H317)
Sulfonic acids, petroleum, calcium salt***	263-093-9***	01-2119488992-18	61789-86-4	1-<3	Skin Sens. 1 (H317)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts***	271-529-4***	01-2119492627-25	68584-23-6	1-<3	Skin Sens. 1 (H317)
C14-16-18 Alkyl phenol***	931-468-2***	01-2119498288-19	^	0.1-<1	STOT RE 2 (H373) Skin Sens. 1B (H317)

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

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.***

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.***

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.***

Inhalation Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.***

Ingestion Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.***

Protection of First-aiders

First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.***

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

Eye contact	Not classified based on available data.***
Skin contact	Not classified based on available data. May produce an allergic reaction. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***
Inhalation	Not classified based on available data.***
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.***

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

Notes to physician Treat symptomatically.***

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Carbon dioxide (CO_2). ABC powder. Foam. Water spray or fog.***

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S. Nitrogen oxides (NOx). Mercaptans.***

5.3. Advice for fire-fighters

Special protective equipment for firefighters Wear self-contained breathing apparatus and protective suit.

Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.***

6.2. Environmental precautions

General Information Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas.***

6.3. Methods and material for containment and cleaning up

Methods for containment If necessary dike the product with dry earth, sand or similar non-combustible materials.***

Methods for cleaning up Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.***

6.4. Reference to other sections

Personal Protective Equipment See Section 8 for more detail.

Waste treatment See section 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling For personal protection see section 8. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing.***

Prevention of fire and explosion Take precautionary measures against static discharges.***

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Provide regular cleaning of equipment, work area and clothing. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.***

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store at room temperature. Protect from moisture.***

Materials to Avoid Strong oxidizing agents.***

7.3. Specific end uses

Specific use(s) Please refer to Technical Data Sheet for further information.***

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m^3, NIOSH (REL) TWA 5 mg/m^3, STEL 10 mg/m^3, ACGIH (TLV) TWA 5 mg/m^3 (highly refined)

Legend See section 16

Derived No Effect Level (DNEL) ***

DNEL Worker (Industrial/Professional)***

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts*** 70024-69-0			0.66 mg/m³ Inhalation 3.33 mg/kg bw/day Dermal	
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts*** 68584-23-6			3.33 mg/kg bw/day (dermal) 0.66 mg/m³ (inhalation)	
C14-16-18 Alkyl phenol*** ^			1.17 mg/m^3 (inhalation) 0.30 mg/kg bw/day (dermal)	

DNEL Consumer***

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts*** 70024-69-0			0.33 mg/m³ Inhalation 1.667 mg/kg bw/day Dermal 0.8333 mg/kg bw/day Oral	
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts*** 68584-23-6			1.667 mg/kg bw/day (dermal) 0.33 mg/m³ (inhalation 0.8333 mg/kg bw/day (oral)	

Predicted No Effect Concentration * (PNEC)**

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts*** 70024-69-0	1 mg/l fw 1 mg/l mw 10 mg/l or	723500000 mg/kg dw fw 723500000 mg/kg dw mw	868700000 mg/kg dw		100 mg/l	16.667 mg/kg food
Sulfonic acids, petroleum, calcium salt*** 61789-86-4	1 mg/l fw 1 mg/l mw 10 mg/l or	226000000 mg/kg sediment dw fw 226000000 mg/kg sediment dw mw	271000000 mg/kg soil dw		1000 mg/l	16.667 mg/kg food
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts*** 68584-23-6	1 mg/l fw 1 mg/l mw 10 mg/l or	723500000 mg/kg dw fw 723500000 mg/kg dw mw	868700000 mg/kg dw		100 mg/l	16.667 mg/kg food
C14-16-18 Alkyl phenol*** ^	0.100 mg/l (fw) 0.010 mg/l (mw) 1 mg/ (or)	4266.16 mg/kg sediment dw (fw) 426.62 mg/kg sediment dw (mw)	852.58 mg/kg soil dw		100 mg/l	

8.2. Exposure controls

Occupational Exposure Controls

Engineering Measures Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.***

Personal Protective Equipment General Information Protective engineering solutions should be implemented and in use before personal protective equipment is considered. The personal protective equipment (PPE)

recommendations apply to the product ITSELF. In case of mixtures or formulations, it is suggested that you contact the relevant PPE suppliers.***

Respiratory protection	None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P1. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***
Eye Protection	If splashes are likely to occur, wear:. Safety glasses with side-shields. EN 166.***
Skin and body protection	Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Type 4/6.***
Hand Protection	Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 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. 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.***

Environmental exposure controls

General Information	The product should not be allowed to enter drains, water courses or the soil.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Color	light brown***
Physical State @20°C	solid***
Odor	Characteristic***
Odor Threshold	No information available***

Property	Values	Remarks	Method
pH		Not applicable***	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable***	
Flash point		Not applicable***	
Evaporation rate		No information available***	
Flammability Limits in Air		***	
upper ***		No information available***	***
Lower ***		No information available***	***
Vapor Pressure		No information available***	

Vapor density		No information available***
Relative density	0.900***	@ 20 °C***
Density	900*** kg/m^3***	@ 20 °C***
Water solubility		Insoluble***
Solubility in other solvents		
logPow		No information available***
Autoignition temperature		No information available***
Decomposition temperature		No information available***
Viscosity, kinematic ***		No information available
Explosive properties	***	Not applicable ***
Oxidizing Properties	Not explosive***	
Possibility of hazardous reactions	Not applicable***	
	None under normal processing***	

9.2. Other information

Freezing Point No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
General Information None under normal processing.***

10.2. Chemical stability
Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Hazardous Reactions No dangerous reaction known under conditions of normal use.***

10.4. Conditions to avoid
Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.***

10.5. Incompatible materials
Materials to Avoid Strong oxidizing agents.***

10.6. Hazardous Decomposition Products
Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Nitrogen oxides (NOx). Mercaptans. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S.***

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute toxicity Local effects Product Information

Skin contact	. Not classified based on available data. May produce an allergic reaction. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.***
Eye contact	. Not classified based on available data.***
Inhalation	. Not classified based on available data.***
Ingestion	. Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.***
ATEmix (oral)	70,513.00*** mg/kg***
ATEmix (dermal)	28,218.00*** mg/kg***
ATEmix (inhalation-dust/mist)	49.00*** mg/l***

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts***	LD50 > 5000 mg/kg (Rat - OECD 401)	LD50 > 5000 mg/kg (Rabbit OECD 402)	
Sulfonic acids, petroleum, calcium salt***	> 16000 mg/kg bw (rat)	> 4000 mg/kg (rabbit)	LC50(4h) > 1.9 mg/l (rat aerosol)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts***	> 5000 mg/kg (Rat - OECD 401)	> 5000 mg/kg bw (rabbit - OECD 402)	> 1.9 mg/l (Rat - aerosol-OECD 403)
C14-16-18 Alkyl phenol***	LD50 2000 mg/kg bw (rat)	LD50 2000 mg/kg bw (rat)	

Sensitization

Sensitization
Specific effects

Not classified based on available data. 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(s). May produce an allergic reaction.***

Carcinogenicity Not classified based on available data.***

Mutagenicity .***

Germ Cell Mutagenicity Not classified based on available data.***

Reproductive toxicity Not classified based on available data.***

Repeated dose toxicity
Target Organ Effects (STOT)

Specific target organ systemic toxicity (single exposure) Not classified based on available data.***

Specific target organ systemic toxicity (repeated exposure) Not classified based on available data.***

Aspiration toxicity Not classified based on available data.***

Other information

Other adverse effects Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).***

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Not classified based on available data.***

Acute aquatic toxicity - Product Information* ** No information available.***

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Benzenesulfonic acid, mono-C16-24-alkyl derivatives, calcium salts*** 70024-69-0	EC50 (72h) > 1000 mg/l (Pseudokirchnerella subcapitata - static)	EC50 (48h) > 1000 mg/l (WAF - Daphnia magna - static)	LL50 (96h) > 10000mg/l (WAF - Cyprinodon variegatus - OECD 203)	
Sulfonic acids, petroleum, calcium salt*** 61789-86-4	EC50(72h) > 1000 mg/l (Pseudokirchnerella subcapitata)	EC50(48h) > 1000 mg/l (Daphnia magna - OECD 202)	LC50(96h) > 10000 mg/l (Cyprinodon variegatus OECD 203)	
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts*** 68584-23-6	EL50(72h) > 1000 mg/l (Pseudokirchneriella subcapitata)	EL50(48h) > 1000 mg/l (Daphnia magna)	LL50(96h) > 10000 mg/l (Cyprinodon variegatus OECD 203)	
C14-16-18 Alkyl phenol*** ^		EC50(48h) > 100 mg/l (Daphnia magna - static - OECD202)		

Chronic aquatic toxicity - Product Information No information available.***

Chronic aquatic toxicity - Component Information

No information available.***

Effects on terrestrial organisms

No information available.***

12.2. Persistence and degradability

General Information

No information available.

12.3. Bioaccumulative potential

Product Information No information available.***

logPow No information available***

Component Information No information available.***

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.***

12.6. Other adverse effects

General Information No information available.***

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products	Should not be released into the environment. Do not empty into drains. Dispose of in accordance with the European Directives on waste and hazardous waste.***
Contaminated packaging EWC Waste Disposal No.	Empty containers should be taken to an approved waste handling site for recycling or disposal.*** 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. The following Waste Codes are only suggestions:. 12 01 12.***
Other information	Refer to section 8 for safety and protective measures for disposal personnel.***

Section 14: TRANSPORT INFORMATION

ADR/RID	Not regulated
IMDG/IMO	Not regulated
ICAO/IATA	Not regulated
ADN	Not regulated

Section 15: REGULATORY INFORMATION

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

HSNO Approval Number HSR002605
HSNO Group Standard Lubricants (Low Hazard) Group Standard 2006

European Union

Further information

No information available***

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available***

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H317 - May cause an allergic skin reaction
H373 - May cause damage to organs through prolonged or repeated exposure***

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists bw
= body weight bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material DNEL = Derived No Effect Level
PNEC = Predicted No Effect Concentration
dw = dry weight fw = fresh water mw = marine water
or = occasional release

Legend Section 8
TWA: Time Weight Average
STEL: Short Time Exposure Limit
PEL: Permissible exposure limit
REL: Recommended exposure limit
TLV: Threshold Limit Values

+	Sensitizer	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date: 2018-06-15 **Revision Note** *** Indicates updated section.

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

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.
End of the Safety Data Sheet