SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 080100

CERAN XM 220

Date of the previous version: 2013-03-15 **Revision Date:** 2014-03-25 **Version** 2

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

1.1. Product identifier

Product name **CERAN XM 220**
Number 4KF
Pure 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 UK LIMITED
One Euston Square
40 Melton Street. London. NW1 2FD
UNITED KINGDOM
Tel: +44 (0)20 7339 8000
Fax: +44 (0)20 7339 8033

For further information, please contact:

Contact Point Specific Product Related Info : 01977 636200
E-mail Address rm.gb-msds@total.co.uk

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
Total UK - + 44 (0) 20 7339 8000
For bitumen only : Total Bitumen -+44 (0) 17 7272 9302

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.

DIRECTIVE 67/548/EEC or 1999/45/EC
For the full text of the R-phrases mentioned in this Section, see Section 16.

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

The substance/mixture is non-dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)
Not classified

2.2. Label elements

Labelled according to Not classified/No labelling required

R-phrase(s)
None

S-phrase(s)
None
Safety data sheet available on request.

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Dir. 67/548)	GHS Classification
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	271-529-4	no data available	68584-23-6	<3	Xi;R36	Eye Irrit. 2 (H319)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	287-494-3	01-2119490234-40	85536-14-7	<2	C;R34 Xn;R22	Skin Corr. 1B (H314) Acute Tox. 4 (H302)
Sulfonic acids, petroleum, calcium salt	263-093-9	no data available	61789-86-4	<2	Xi;R36	Eye Irrit. 2 (H319)
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	274-263-7	01-2119492616-28	70024-69-0	<2	Xi;R36	Eye Irrit. 2 (H319)

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

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

4. FIRST AID MEASURES

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

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 Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse.
High pressure jets may cause skin damage. Take victim immediately to hospital.

Inhalation Move to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

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

Eye contact Not classified.

Skin contact Not classified. 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. Inhalation of vapours in high concentration may cause irritation of respiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Foam. Carbon dioxide (CO_2). ABC powder. 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.

5.3. Precautions for fire-fighters

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

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

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

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. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Contain spillage, and then collect with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Collect free product with suitable mechanical means. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Personal protective equipment See Section 8 for more detail.

Waste treatment See section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. 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

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

Technical measures/Storage conditions	Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto 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. Protect from frost, heat and sunlight. Protect from moisture.
Materials to avoid	Strong oxidising agents.

7.3. Specific use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parametres

Exposure limits	oil mist : 10mg/m³, for 15 minutes oil mist : 5mg/m³, for 8 hours
Legend	See section 16

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts 68584-23-6			3.33 mg/kg bw/day (dermal) 0.66 mg/m³ (inhalation)	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. 85536-14-7			12 mg/m³ Inhalation 170 mg/kg Dermal	12 mg/m³ Inhalation
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts 70024-69-0			0.66 mg/m³ Inhalation 3.33 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, 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)	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. 85536-14-7			3 mg/m³ Inhalation 85 mg/kg Dermal 0.85 mg/kg bw/day Oral	3 mg/m³ Inhalation

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts 70024-69-0			0.33 mg/m³ Inhalation 1.667 mg/kg bw/day Dermal 0.8333 mg/kg bw/day Oral	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. 85536-14-7	0.287 mg/l fw 0.0287 mg/l mw 0.0167 mg/l or	0.287 mg/kg dw fw 0.287 mg/kg dw mw	35 mg/kg dw		3.43 mg/l	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., 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			100 mg/l	16.667 mg/kg food

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures

Apply technical measures to comply with the occupational exposure limits. 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

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

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). 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.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.

Hand protection

Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile 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. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

Environmental exposure controls

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Colour		amber	
Physical state @20°C		solid	
Odour		characteristic	
Property	**Values**	**Remarks**	**Method**
pH		not applicable	
Boiling point/boiling range		not applicable	
Flash point		No information available	
Evapouration rate		No information available	
Flammability Limits in Air		No information available	
Vapour pressure		No information available	
Vapour density		No information available	
Density	~ 900 kg/m³	@ 20 °C	
Water solubility		Insoluble	
Solubility in other solvents		Soluble in many common organic solvents	
logPow		No information available	
Autoignition Temperature		No information available	
Viscosity, kinematic	220 mm2/s	@ 40 °C	
Explosive properties	Not explosive		
Oxidising Properties	not applicable		
Possibility of hazardous reactions	not applicable		

9.2. Other information

Penetration index	28 - 31 mm	I-2137
Drop point	300 °C	I-396

10. STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

Hazardous reactions None under normal processing.

10.4. Conditions to Avoid

Conditions to Avoid Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products None under normal use. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact . Not classified. 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.

Inhalation . Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.

Ingestion . Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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)
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	LD50 > 200 - 2000 mg/kg (rat - OECD 401)		
Sulfonic acids, petroleum, calcium salt	> 5000 mg/kg (Rat)	> 4000 mg/kg (Rabbit)	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	LD50 > 5000 mg/kg (OECD 401)	LD50 > 2000 mg/kg (OECD 402)	

Sensitisation

Sensitisation Not classified as a sensitizer.

Specific effects

Carcinogenicity This product is not classified carcinogenic.
Mutagenicity This product is not classified as mutagenic.

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

Reproductive toxicity This product does not present any known or suspected reproductive hazards.

Repeated Dose Toxicity

Subchronic Toxicity No information available.

Target Organ Effects (STOT)

Target Organ Effects (STOT) No information available.

Other information

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

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Not classified.

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, 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)	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. 85536-14-7	EC50 (72h) > 10 - 100 mg/l (Desmodesmus subspicatus - OECD 201)	EC50 (48h) > 1 - 10 mg/l (Daphnia magna - OECD 202)	LC50 (96h) > 1 - 10 mg/l (Cyprinus carpio - OECD 203)	
Sulfonic acids, petroleum, calcium salt 61789-86-4		EC50 (48h) > 100 mg/l Daphnia magna (OECD 202)	LC50 (96h) > 10000 mg/l Cyprinodon variegatus (OECD 203)	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts 70024-69-0	EC50 (72h) > 1000 mg/l (Pseudokirchnerella subcapitata - static)	EC50 (48h) > 1000 mg/l (Daphnia magna - static)	LL50 (96h) > 10000 mg/l (Cyprinodon variegatus - OECD 203)	

Chronic aquatic toxicity - Product Information
No information available.

Chronic aquatic toxicity - Component Information
No information available.

Effects on terrestrial organisms

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

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 .

Chemical Name	log Pow
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - 85536-14-7	2

12.4. Mobility in soil

Soil Given its physical and chemical characteristics, the product has no soil mobility.

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.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No The following Waste Codes are only suggestions:. 12 01 12. 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.

14. TRANSPORT INFORMATION

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

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

15. REGULATORY INFORMATION

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

European Union

International Inventories

EINECS/ELINCS	-
TSCA	-
DSL	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

Further information

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available

15.3. National regulatory information

SDS # : 080100

CERAN XM 220

Revision Date: 2014-03-25 **Version** 2

The United Kingdom

• Avoid exceeding occupational exposure limits (see section 8).

Ireland

• Avoid exceeding occupational exposure limits (see section 8).

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
R36 - Irritating to eyes
R34 - Causes burns
R22 - Harmful if swallowed

Full text of H-Statements referred to under sections 2 and 3
H319 - Causes serious eye irritation
H314 - Causes severe skin burns and eye damage
H302 - Harmful if swallowed

Abbreviations, acronyms

Legend Section 8			
+	Sensitiser	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date: 2014-03-25
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 Safety Data Sheet