SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 33318

CERAN GEP

Date of the previous version: 2015-04-08 **Revision Date:** 2016-02-10 **Version** 4.01

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

1.1. Product identifier

Product name **CERAN GEP**
Number HNQ
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

A - 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

B - 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

For further information, please contact:

Contact Point

A - Specific Product Related Info: 01977 636200

B - HSE

E-mail Address

A - rm.gb-msds@total.co.uk

B - rm.msds-lubs@total.com

1.4. Emergency telephone number

00 33 149 00 00 49 (24h/24, 7d/7)
TOTAL UK ltd: + 44 (0) 20 7339 8000
For Lubricants only: TOTAL Lubricants - +44 (0)1977 636200
For bitumen only: Total Bitumen -+44 (0) 17 7272 9302

UK: National Poisons Information Service (NPIS): NHS111 or a doctor

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

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
Chronic aquatic toxicity - Category 3*** - (H412)***

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008

Hazard Statements ***
H412 - Harmful to aquatic life with long lasting effects***

Precautionary statements
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation***

Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts, Sulfonic acids, petroleum, calcium salt, Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl. May produce an allergic reaction***

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

Hazardous components

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	GHS Classification
Benzenesulfonic acid, mono-C16-24-alkyl derivs., 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	no data available	61789-86-4	1-5	Skin Sens. 1 (H317)
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts***	271-529-4	no data available	68584-23-6	1-5	Skin Sens. 1 (H317)

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl***	931-384-6	01-2119493620-38	^	1-2.4	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411) Eye Dam. 1 (H318) Skin Sens. 1 (H317)***
(Z)-N-9-octadecenylpropane -1,3-diamine***	230-528-9	no data available	7173-62-8	0.01-0.1	STOT RE 1 (H372) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)***
(Z)-octadec-9-enylamine***	204-015-5	no data available	112-90-3	0.01-0.1	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT RE 2 (H373) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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 Rinse thoroughly with plenty of water, also under the eyelids. Rinse immediately with plenty of water and seek medical advice. Keep eye wide open while rinsing.

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. Wash off with soap and water.

Inhalation Inhalation of high concentrations of vapour or aerosols may cause irritation of the upper respiratory tract.

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. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.

Skin contact	Not classified. 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. 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.

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.

5.3. Precautions for fire-fighters

Special protective equipment for fire-fighters	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 flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses.

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Powdered material may form explosive dust-air mixtures. 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). 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.

Section 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. Use personal protective equipment as required. Wash hands with water as a precaution. Avoid extended and repeated contact with the skin as this may cause skin disorders, which may also be aggravated by minor injuries or by contact with soiled clothing.

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. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. 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)

Specific use(s) No information available.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parametres

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Exposure limits Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

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, mono-C16-24-alkyl derivs., 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)	
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl*** ^			12.5 mg/kg/8h (dermal) 8.56 mg/m³/8h (inhalation) (ECHA CHEM)	
(Z)-N-9-octadecenylpropane-1,3-diamine*** 7173-62-8			0.035 mg/m³ (inhalation) 0.010 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 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	
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)	

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl*** ^			6.25 mg/kg/24h (dermal) 2.2 mg/m³/24h (inhalation) 0.25 mg/kg/24h (oral) (ECHA CHEM)	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
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
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
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** ^	0.0012 mg/l fw 0.00012 mg/l mw 0.064 mg/ or	3.13 mg/kg fw 0.313 mg/kg mw	2.54 mg/kg soil dw		24.33 mg/l	10 mg/kg food
(Z)-N-9-octadecenyl propane-1,3-diamine*** 7173-62-8	0.01 mg/l fw 0.001 mg/l mw***	1.72 mg/kg/dw fw 0.172 mg/kg/dw mw***	10 mg/kg/dw***		0.251 mg/l***	

8.2. Exposure controls

Occupational Exposure Controls

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

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	Protective engineering solutions should be implemented and in use before personal protective equipment is considered.
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/P2. 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. Do not wear rings, watches or anything similar which can retain the product and may cause a skin reaction. Extended and repeated contacts with skin can cause skin ailments which may be aggravated by minor injuries or contact with soiled clothing.
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.***

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

Appearance	smooth
Colour	black
Physical state @20°C	solid
Odour	characteristic
Odour 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		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
Relative density		No information available
Density	900 kg/m³	@ 20 °C
Water solubility		No information available
Solubility in other solvents		No information available
logPow		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Explosive properties	Not explosive	
Oxidising properties	Not applicable	
Possibility of hazardous reactions	No information available***	

9.2. Other information

Freezing point No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

General Information No information available.

10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

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. Take precautionary measures against static discharges. Strong oxidising agents.

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.

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact . Not classified. 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. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.

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, mono-C16-24-alkyl derivs., calcium salts***	LD50 > 5000 mg/kg (OECD 401)	LD50 > 2000 mg/kg (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)
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl***	LD50 2000 mg/kg bw (Rat - OECD TG 401)		-
(Z)-N-9-octadecenylpropane-1,3-diamine***	LD50 500-1000 mg/kg (rat)***		
(Z)-octadec-9-enylamine***	LD50 1689 mg/kg bw (Rat)		

Sensitisation

Sensitisation The supplier of one of the components contained within this formulation has indicated that they have data, which confirms that at the concentration used, no sensitisation classification is required. Contains senitizer(s). Not classified as a sensitizer. May produce an allergic reaction.

Specific effects

Carcinogenicity This product is not classified carcinogenic.
Mutagenicity This product is not classified as mutagenic.
Reproductive toxicity This product does not present any known or suspected reproductive hazards.

Repeated Dose Toxicity

Subchronic Toxicity No information available.

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Target Organ Effects (STOT)

Target Organ Effects (STOT) No information available. Central Vascular System (CVS). Eyes. Respiratory system. Skin.

Other information

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

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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 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)	
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)	
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** ^	EL50 (96h) > 15 mg (Selenastrum capricornutum - OECD 201) EC50 (96h) 6.4 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 15 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 6.4 mg/L (Selenastrum capricornutum- OECD TG 201) (ECHA CHEM)	EL50 (48h) ca. 91.4 mg/l (Daphnia magna - OECD 202)	LL50 (96h) ca. 24 mg/l (Oncorhynchus mykiss - OECD 203)	
(Z)-octadec-9-enylamine*** 112-90-3	ERC50 (72h) 0.46 mg/l (Desmodesmus subspicatus - OECD 201) EBC50 (72h) 0.38 mg/l (Desmodesmus subspicatus - OECD 201)	EC50 (48h) 0.011mg/l (Daphnia magna - OECD 202)	LC50 (96h) 0.11 mg/l (Pimephales promelas - OECD 203)	

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Chronic aquatic toxicity - Product Information
No information available.

Chronic aquatic toxicity - Component Information
.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** ^	NOEC (96h) 1.7 mg/l (Pseudokirchnerella subcapitata - OECD 201) par NOEC (96h) 3.3 mg/l (Pseudokirchnerella subcapitata - OECD 201)	EL50 (21d) 0.91 mg/l (Daphnia magna - OECD 211) NOEL (21d) 0.12 mg/l (Daphnia magna - OECD 211) EL50 (21d) 0.66 mg/l (Daphnia magna - OECD 211)	-	EC50 (3h) ca. 2433 mg/L (Activated Sludge, domestic - OECD TG 209) (ECHA CHEM)
(Z)-octadec-9-enylamine*** 112-90-3	NOEC(72h) 0.15 mg/l (Desmodesmus subspicatus - OECD 201) NOEC(96h) 0.01 mg/l (Selenastrum capricornutum - OECD 201)	NOEC(21d) 0.013 mg/l (Daphnia magna - OECD 211)		

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 .

Chemical Name	log Pow
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** - ^	< 0.30 to >7.10 (OECD TG 117) (ECHA CHEM)
(Z)-N-9-octadecenylpropane-1,3-diamine*** - 7173-62-8	0.03 à 25.7°C et pH 6.8***

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.

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

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. Dispose of in accordance with the European Directives on waste and hazardous waste. If recycling is not practicable, dispose of in compliance 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.

Other information No information available.

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

European Union

International Inventories No information available***

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

Further information

No information available***

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available

15.3. National regulatory information

The United Kingdom

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

Ireland

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

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H373 - May cause damage to the kidneys/ liver/ eyes/ brain/ digestive system/ central nervous system through prolonged or repeated exposure if swallowed
H304 - May be fatal if swallowed and enters airways
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H317 - May cause an allergic skin reaction
H301 - Toxic if swallowed
H315 - Causes skin irritation
H290 - May be corrosive to metals
H411 - Toxic to aquatic life with long lasting effects***

SDS # : 33318

CERAN GEP

Revision Date: 2016-02-10 **Version** 4.01

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

Legend Section 8
TWA: Time Weight Average
STEL: Short Time Exposure Limit

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

Revision Date: 2016-02-10
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