SAFETY DATA SHEET

Corrogel Offshore

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	18.06.2008
Revision date	23.05.2019

1.1. Product identifier

Product name	Corrogel Offshore
Formula	Formulated product

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

Use of the substance / preparation	Rust remover

1.3. Details of the supplier of the safety data sheet

Downstream user

Company name	NorKem AS
Office address	Lagerveien 12B
Postcode	4033
City	STAVANGER
Country	Norway
Telephone number	+47 51951830
Fax	+47 51951831
Email	post@norkem.no

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 22 59 13 00 Description: Toxic Information

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Irrit. 2; H319 Skin Irrit. 2; H315
Substance / mixture hazardous properties	Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

Hazard pictograms (CLP)

Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice / attention.

2.3. Other hazards

PBT / vPvB	This product is not classified as PBT or vPvB.
Health effect	Causes skin irritation. Causes serious eye irritation.

SECTION 3: Composition / information on ingredients

3.1. Substances

Substance	Identification	Classification	Contents
Phosphoric acid...%	CAS No.: 7664-38-2 EC No.: 231-633-2 REACH Reg. No.: 01-2119485924-24-xxxx	Skin Corr. 1B; H314; Met. Corr. 1; H290; Note : B	10 - 19 %
Substance comments	The full text for all hazard statements is displayed in section 16.		

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothes. Flush skin thoroughly with water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses. Immediately flush with plenty of water for up to 15 minutes, also under eyelids. Immediately seek out eyedoctor/doctor. Continue flushing during transport to doctor.
Ingestion	DO NOT INDUCE VOMITING! Rinse nose, mouth and throat with water. Drink

	plenty of water. Do not give victim anything to drink if he is unconscious. Get medical attention.

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

General symptoms and effects	Inhalation: Gas or vapour may irritate respiratory system. Skin contact: Irritating to skin. Defatting, drying and cracking of skin. Eye contact: Irritating and may cause redness and pain. May cause serious eye damage. Ingestion: Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. nausea, vomiting and diarrhoea

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

Other information	When seeking medical advice, bring the safety data sheet or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray, dry powder, alcohol resistant foam or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is not flammable. Contact with metals can produce Hydrogen, which can give explosive consentration with air.

5.3. Advice for firefighters

Personal protective equipment	Use self-contained breathing apparatus when the product is involved in fire.
Other information	Flame exposed containers is cooled with water. If possible without any risk, remove container from fireplace.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Wear protective clothing as described in Section 8 of this safety data sheet. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautionary measures	Attempt to stop the leak, if no risk is involved. Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. Flush with water.

6.3. Methods and material for containment and cleaning up

Clean up	Small spillage is dried or flushed with water. Collect with non-combustible absorbent material. Dike for large spills. Inform Authorities if large amounts are

	involved.

6.4. Reference to other sections

Other instructions	See section 8 and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Wear protective clothing as described in Section 8. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store at cool temperature and in closed containers. Store separated from: Alkalies.

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Phosphoric acid...%	CAS No.: 7664-38-2	TWA (8h) : 1 mg/m3 **Exposure limit letter** Letter code: E	TWA Year: 2013
Other Information about threshold limit values	References (laws/regulations): Norwegian regulation on exposure limits: "FOR-2011-12-06-1358. Explanation of the notations: E = The substance has an EU workplace exposure limit		

DNEL / PNEC

Substance	Phosphoric acid...%
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (local) **Value:** 2,92 mg/m³ **Group:** Consumer **Route of exposure:** Long-term inhalation (local) **Value:** 0,73 mg/m³

8.2. Exposure controls

Safety signs

Precautionary measures to prevent exposure

Instruction on measures to prevent exposure	All handling to take place in well-ventilated area. Personal protecting equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Provide eyewash, quick drench. Avoid contact with eyes and prolonged skin contact. Avoid eating, drinking and smoking when using the product.

Eye / face protection

Suitable eye protection	Use CE-labeled safety goggles or face shield. EN 166

Hand protection

Suitable gloves type	Material : Nitrile rubber Glove thickness : 0,4 mm Breakthrough time: : > 480 min Material : Fluorinated rubber Glove thickness : 0,4 mm Breakthrough time: : > 480 min Use CE-labeled gloves according to EN 374.
Hand protection, comments	Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer

Skin protection

Suitable protective clothing	Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection

Recommended type of equipment	In case of inadequate ventilation use suitable respirator. Use respiratory equipment with gas filter, type BE + P3. Use CE-labeled protecting equipment. Use EN 140 for half face mask, EN 136 for full face mask. Particle filter: EN 143, Gasfilter: EN 14387.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Jelly-like.
Colour	White.
Odour	Slight odour.
Odour limit	Comments: No data available.
pH	Status: In delivery state Value: ~ 1.2
Melting point / melting range	Value: - 10 °C
Boiling point / boiling range	Value: ~ 150 °C

Flash point	Value: > 80
Evaporation rate	Comments: No data available.
Flammability (solid, gas)	Not relevant.
Lower explosion limit with unit of measurement	Comments: No data available.
Upper explosion limit with units of measurement	Comments: No data available.
Vapour pressure	Comments: No data available.
Vapour density	Comments: No data available.
Relative density	Value: 1080 kg/m3
Solubility	Comments: Completely soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Spontaneous combustability	Comments: No data available.
Viscosity	Comments: Not determined.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not known.

10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	May react with strong alkali.

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with alkalis.

10.5. Incompatible materials

Materials to avoid	Alkalies. Affects metals, wood, etc.

10.6. Hazardous decomposition products

Hazardous decomposition products	Fire or high temperatures can create: Phosphoroxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: Comments: Not known. Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: Comments: Not known. Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: Comments: Not known.
Substance	Phosphoric acid...%
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 2,6 g/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** 2,74 g/kg **Animal test species:** Rabbit

Other information regarding health hazards

Assessment of acute toxicity, classification	The classification criteria are not met based on available data.
Assessment of skin corrosion / irritation, classification	Irritating to skin.
Assessment of eye damage or irritation, classification	Causes serious eye irritation.
Assessment of respiratory sensitisation, classification	The classification criteria are not met based on available data.
Assessment of skin sensitisation, classification	The classification criteria are not met based on available data.
Assessment of germ cell mutagenicity, classification	The classification criteria are not met based on available data.
Assessment of carcinogenicity, classification	The classification criteria are not met based on available data.

Assessment of reproductive toxicity, classification	The classification criteria are not met based on available data.
Assessment of specific target organ SE, classification	The classification criteria are not met based on available data.
Assessment of specific target organ toxicity RE, classification	The classification criteria are not met based on available data.
Assessment of aspiration hazard, classification	The classification criteria are not met based on available data.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic, fish	Comments: Not known.
Substance	Phosphoric acid...%
Acute aquatic, fish	**Value:** 138 mg/l **Effect dose concentration :** LC50 **Exposure time:** 96 hour(s) **Species:** Gambusia affinis **Value:** 3 - 3,25 mg/l **Effect dose concentration :** LC50 **Exposure time:** 96 hour(s) **Species:** Lepomis macrochirus
Acute aquatic, fish LCLo	
Acute aquatic, algae	Comments: Not known.
Substance	Phosphoric acid...%
Acute aquatic, algae	**Value:** 100 mg/l **Effect dose concentration :** NOEC **Exposure time:** 72 hour(s) **Species:** Desmodesmus subspircatus **Method:** OECD TG 201 **Value:** > 100 mg/l **Effect dose concentration :** EC50 **Exposure time:** 72 hour(s) **Species:** Desmodesmus subspicatus
Acute aquatic, Daphnia	Comments: Not known.
Substance	Phosphoric acid...%
Acute aquatic, Daphnia	**Value:** > 100 mg/l **Effect dose concentration :** EC50 **Exposure time:** 48 hour(s) **Species:** Daphnia magna
Substance	Phosphoric acid...%
Toxicity to bacteria	**Value:** 270 mg/l **Effect dose concentration :** EC50 **Comments:** Activated mud.

12.2. Persistence and degradability

Persistence and degradability, comments	The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.

12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results	This product does not contain any PBT or vPvB substances.
Substance	Phosphoric acid...%
PBT assessment results	According to Regulation nr. 1907/2006, no PBT or vPvB assessment have been done because the product is inorganic.

12.6. Other adverse effects

Environmental details, summation	The product lowers the pH in water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.
EWC waste code	EWC waste code: 060104 phosphoricand phosphorous acid Classified as hazardous waste: Yes
NORSAS	7131 Acids, inorganic
Other information	EWC waste code: 060104 phosphoric and phosphorous acid.

SECTION 14: Transport information

Dangerous goods	No

14.1. UN number

Comments	Not relevant.

14.2. UN proper shipping name

Comments	Not relevant.

14.3. Transport hazard class(es)

Comments	Not relevant.

14.4. Packing group

Comments	Not relevant.

14.5. Environmental hazards

Comments	Not relevant.

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

ADR / RID - Other information

Tunnel restriction code	Not relevant.

SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No. 648/2004 on detergents. Regulation on classification, labeling and packaging of substances and mixtures (CLP). Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II. Administrative norms for pollution of the atmosphere, the latest edition, from Norwegian labour inspection authority. Norwegian regulations on waste, no. 930/2004. Dangerous Goods regulations.
Declaration No.	170620

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H319 Causes serious eye irritation.
CLP classification, comments	Classification procedure: calculation method.
Information added, deleted or revised	REVISIONS: ---------- 13.11.2012: REACH Annex II. 25.11.2014: CLP classification. 03.08.2016 13.09.2016: Changes to section 8. 21.04.2017: General revision.

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