1. Identification of the Product and Supplier

Product name:	***SioxX®-Ten, SioxX®-Ten PLUS***
Product application:	Microsilica-gel bonded alumina based no-cement castables.
Address/Phone No.:	**Elkem ASA, Silicon Products** P.O. Box 334 Skøyen N-0213 Oslo, Norway Telephone: + 47 22 45 01 00 https://www.elkem.com/silicon-products/
Contact:	support.siliconproducts@elkem.com
REACH and CLP helpdesk:	REACH Website: http://echa.europa.eu/help/nationalhelp_contact_en.asp CLP Website: http://echa.europa.eu/clp/clp_help_en.asp
Emergency Phone No.:	not applicable for non-hazardous products.

2. Hazards Identification

Classification of the product:	The product does not meet the criteria for hazard classification in accordance with Regulation (EC) No1272/2008 (CLP) and the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS, 10th edition).
Hazard pictogram:	N/A (not applicable)
Signal word:	N/A (not applicable)
Hazard statements:	N/A (not applicable)
Precautionary statements:	N/A (not applicable)

3. Composition/Information on Ingredients

CHEMICAL NAME	CAS #	EC #	REACH reg.nr.	% w/w
Silica fume*	69012-64-2	273-761-1	01-2119480401-47-0065	55-70
Aluminium oxide	1344-28-1	215-691-6	01-2119529248-35-xxxx	25-40
Proprietary additives				Balance

* The product meets the criteria as a nanoform in accordance with Commission Recommendation 2011/606/EU and 2022/C 229/01.

4. First Aid Measures

Inhalation:	Irritation/dehydration caused by dust: Fresh air. See a physician on persistent feeling of discomfort.
Skin contact:	Wash contaminated skin with water and/or a mild detergent.
Eye contact:	Rinse eyes with water/saline solution. See a physician on persistent feeling of discomfort.
Ingestion:	Remove the person affected from dust-exposed area. See inhalation.

5. Fire Fighting Measures

The product is not combustible and there is no inherent risk of explosion.

Extinguishing media: Not applicable Depending on surrounding fire.

6. Accidental Release Measures

Material should be collected in suitable containers.

7. Handling and Storage

Handling:	Avoid generating airborne dust.
Storage:	Keep dry in closed containers.

8. Exposure Controls/Personal Protection

A) Occupational exposure controls:
Avoid inhalation of dust. Ensure good dust ventilation during use. Wear a CE-marked respirator according to EN 149 FFP 2S/3S during dust generating operations. Use protective gloves and eye protection. Facilities for eye flushing should be available.

Occupational Exposure Limits (ACGIH [1], 2015):

		ACGIH TLV				
		8hr TWA		15 minute STEL		Notations
Substance	**[CAS No.]**	**ppm**	**mg/m³**	**ppm**	**mg/m³**	
PNOS[2]	-	-	10(I)/3(R)	-	-	-
Aluminium metal [7429-90-5] and insoluble compounds	-	-	1(R)	-	-	A4

[1] American Conference of Governmental Industrial Hygienists
[2] Particulates (Insoluble or Poorly Soluble) Not Otherwise Specified. Amorphous silica fume is considered to be PNOS. Specific TLVs for the individual substances have not been established or have been withdrawn, respectively.
(I) Inhalable fraction
(R) Respirable fraction

B) Environmental exposure controls:

Target value and limit value for PM_{10} and $PM_{2.5}$ (Directive 2008/50/EC):

	Averaging period	Limit value
PM_{10}	One day	50 µg/m^3★
PM_{10}	Calendar year	25 µg/m^3
$PM_{2,5}$	Calendar year	15 µg/m^3

★Not to be exceeded more than 30 times a calendar year.

9. Physical and Chemical Properties

Form:	Powder.
Colour:	Grey.
Odour:	None.
Solubility:	The particles are insoluble in water. Soluble in alkali hydroxides
Solubility (Organic solvents):	Insoluble.
Melting point:	1,400-1,500 °C
Bulk density:	300-550 kg/m^3
pH value (10 % solution):	8-10

10. Stability and reactivity

Conditions to avoid:

Avoid storage under wet/humid conditions. When mixing the product with water, an alkaline reaction will take place before hardening.

Materials to avoid:

Strong mineral acids e.g. nitric acid (HNO_3) and hydrofluoric acid (HF).

Hazardous Decomposition Product(s):

The product will react with strong mineral acids forming toxic gases (e.g. NO_x, SiF_4).

11. Toxicological Information

The product does not meet the criteria for hazard classification according to Regulation (EC) No1272/2008 (CLP) and the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS, 10th rev.).

Acute effects:

INGESTION:	Dust may cause irritation and dehydration of mucous membranes.
INHALATION:	Dust may cause irritation and dehydration of mucous membranes.
SKIN CONTACT:	Dust may cause irritation and dehydration.
EYE CONTACT:	Dust may cause irritation and dehydration.

Chronic effects:

Inhalation of dust from the product is not considered to entail a risk of developing silicosis due to the amorphous character of the silica component.
Chronic obstructive lung disease is suspected following long-term exposure (years) to silica fume (CAS No 69012-64-2) at concentrations above recommended occupational exposure limits.

Endocrine disrupting properties: The product is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU)2017/2100 or Commission Regulation (EU)2018/605.

12. Ecological Information

The product is not characterised as dangerous for the environment.

MOBILITY:	The product is not mobile in the environment under normal environmental conditions.
PERSISTENCE:	Not relevant for inorganic substances.
BIOACCUMULATION:	Not relevant, due to low mobility and non-dispersive use.
ECO-TOXICITY:	The product does not meet the classification criteria for ecotoxicological endpoints in accordance with Regulation (EC) 1272/2008 (CLP) and the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS, 10th rev.).

Endocrine disrupting properties: The product is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU)2017/2100 or Commission Regulation (EU)2018/605.

13. Disposal Considerations

The material should be recovered for recycling if possible.
This material is not classified as hazardous waste according to Commission Decisions 2000/532/EC and 2001/118/EC. Prior to disposal of large quantities of this material advice should be sought from the relevant Waste Regulation Authority.

14. Transport Information

UN	-
IMDG/IMO	Not subject to classification
ADR/RID	Not subject to classification
ICAO/IATA	Not subject to classification

15. Regulatory Information

The text of this Product Safety Information is prepared in compliance with:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS, 10th rev.).

16. Other Information

According to Chapter 1.5.2 of the UN Globally Harmonised System of classification and labelling of chemicals (GHS), Article 58 (2)(a), and Article 59(2)(b) of (EC) No 1272/2008 (CLP), which amends REACH article 31(1), safety data sheets (SDS) are only required for substances and mixtures that meet the harmonised criteria for physical, health or environmental hazards. Since this product does not meet these criteria, a SDS according to (EU) 2020/878 is not issued. In order to communicate relevant HSE-(health, safety and environmental-) information, this product safety information (PSI) is provided instead.

In accordance with REACH article 31(5), safety data sheets shall be supplied in an official language of the Member State(s) where the substance or mixture is placed on the market. This obligation, however, only applies for hazard-classified products which require a formal SDS. Since this product is not hazard-classified, the product safety information (PSI) is, in accordance with current regulation, provided in English language only.

REACH article 31(7) requires relevant exposure scenarios from the Chemical Safety Report (CSR) to be annexed to the SDS. However, according to REACH Annex I, section 0. (Introduction), subsection 0.6. no 4 and 5, exposure scenarios are only required for hazard-classified substances or mixtures. Since this product is not hazard-classified according to CLP, there is no requirement for exposure scenarios.

Changes from revision 00 to 01: trademark included.
Changes from rev. 01 to 02: reference to nano-definition updated (section 3).