1. Identification of the Product and Supplier

Product name:	***SIDISTAR ® (all grades)***
Product application:	Additive to polymeric organic materials.
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 registration number:	01-2119486866-17-0000
REACH and CLP helpdesk:	REACH and CLP website: https://echa.europa.eu/support/helpdesks/
Emergency Phone No.:	not applicable for non-hazardous substances.

2. Hazards Identification

Classification of the substance	The substance 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, 9th rev.).
Hazard pictogram:	N/A (not applicable)
Signal word:	N/A (not applicable)
H-phrases:	N/A (not applicable)
P-phrases:	N/A (not applicable)

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.

3. Composition/Information on Ingredients

Synonyms:	Amorphous silica, Silicon dioxide powder, Silica fume.
IUPAC-name:	Silicon dioxide
CAS No.:	69012-64-2
EINECS No.:	273-761-1

The product meets the criteria as a nanoform in accordance with Commission Recommendation 2011/696/EU. It is a nanoform in accordance with (EU) 2020/878.

4. First Aid Measures

Inhalation:	Remove exposed person from dusty area. Fresh air.
Skin contact:	Wash contaminated skin with water and/or a mild detergent.
Eye contact:	Rinse eyes with water/saline solution. If discomfort persists, seek medical advice.
Ingestion:	Not applicable.

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

Avoid exposure to dust of the product. Released material should be collected in suitable containers.

7. Handling and Storage

Handling:	Avoid dust generation. See section 8.
Storage:	Keep away from hydrofluoric acid (HF). Not to be stored at temperatures near to or below 0 °C.

8. Exposure Controls/Personal Protection

A) Occupational exposure controls:

Avoid inhalation of dust. Ensure good dust ventilation during use. Wear a particulate 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)], 2016):

		8hr TWA		ACGIH TLV 15 minute STEL		Notations
Substance	**[CAS No.]**	**ppm**	**mg/m³**	**ppm**	**mg/m³**	
PNOS[2)]	-	-	10[(I)]/3[(R)]	-	-	-
Silica, crystalline (SiO_2) Quarz*	[14808-60-7]	-	0.025[(R)]	-	-	A2
Cristobalite*	[14464-46-1]	-	0.025[(R)]	-	-	A2

[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

The amount of respirable crystalline silica (quartz, cristobalite) in SIDISTAR determined by X-ray diffraction is below 0.1 % and does not trigger hazard-classification.

B) Environmental exposure controls

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:	Ultrafine amorphous powder (respirable dust). Dust forms agglomerates.
Colour:	Grey, off-white
Odour:	Odourless
Melting Point (°C):	1550-1570
Solubility (Water):	Insoluble/Slightly soluble
Solubility (Organic solvents):	Insoluble/Slightly soluble
Specific Gravity (water =1):	2.2-2.3
Bulk density (kg/m^3) approx.:	150-700
Specific surface (m^2/g):	15-30
Particle size, mean (µm):	≈ 0.15 (less than 0.1 % of primary particles > 45 µm)

10. Stability and reactivity

Conditions to avoid: See below

Materials to avoid: Hydrofluoric acid (HF).

Hazardous Decomposition Product(s):

The product reacts with hydrofluoric acid (HF) forming toxic gas (SiF_4).

Heating the product above 1000 °C can result in the formation of crystalline SiO_2-modifications as cristobalite / tridymite which may cause pulmonary fibrosis (silicosis).

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, 9th rev.).

Acute effects:

INGESTION:	Finely divided dust may cause mechanical irritation and dehydration of mucous membranes.
INHALATION:	Finely divided dust may cause mechanical irritation and dehydration of mucous membranes.
SKIN CONTACT:	Finely divided dust may cause mechanical irritation and dehydration.
EYE CONTACT:	Finely divided dust may cause mechanical irritation and dehydration.

Chronic effects:

Inhalation of dust from the product is considered to entail minimal risk of pulmonary fibrosis (silicosis). However, chronic obstructive lung disease is suspected following long term exposure (years) for 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 under normal environmental conditions.
PERSISTENCE:	Not relevant for inorganic substances.
BIOACCUMULATION:	Not relevant.
ECOTOXICITY:	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, 9th 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 Environment Agency Office.

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

A chemical safety assessment (CSA) has been carried out for the product in accordance with Regulation (EC) 1907/2006 (REACH).

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, 9th rev.)

The substance is listed in the following international chemical inventories:

Europe	EINECS
USA	TSCA
Canada	DSL
Australia	AICS
New Zealand	NZIoC
Japan	MITI inventory (ENCS)
Korea	KECI
China	IECSC
Philippines	PICCS
Sweden	BASTA
Taiwan	NECSI

16. Other Information

According to Chapter 1.5.2 of the UN Globally Harmonized 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 in accordance with REACH article 32, 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.

Literature references are available upon request.

SIDISTAR® is a trademark of Elkem ASA.

Changes from revision 01 to 02: New corporate address. Paragraph 2 in section 16.
Changes from revision 02 to 03: generic e-mail address in section 1. Reference to DSD directive removed. Reference to (EU) 2015/830 inserted in section 16. Updated ACGIH values in section 8.
Changes from revision 03 to 04: PSI covers all SIDISTAR® grades, reference to GHS 6th rev. inserted.
Changes from revision 04 to 05: corporate name change (ASA), reference to GHS 7th rev.
Changes from revision 05 to 06: company info (section 1) and limit values (section 8 B) updated.
Changes from revision 06 to 07: new company logo, reference to GHS 9 and (EU) 2020/878. Assessment of endocrine disrupting properties in section 2, 11, 12.
Changes from revision 07 to 08: rewritten assessment EDC properties (section 11 & 12), changed contact information company (section 1), rewritten assessment nanoform (section 3)