

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

ARC DEEP LEVEL Supercedes date 02-Aug-2024

Revision date 02-Aug-2024 Revision Number 1

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

1.1. Product identifier	
Product Name	ARC DEEP LEVEL
Form	This substance/ mixture contains nanoforms
Other means of identification	
Pure substance/mixture	Mixture
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended use	Building and construction work
Uses advised against	None known
1.3. Details of the supplier of the sa	afety data sheet
Company Name Bostik Industries Limited Newtown, Swords Co. Dublin Ireland Tel: +353 (1) 8624900 Fax: +353 (1) 8402186	
E-mail address	SDS.box-EU@bostik.com
1.4. Emergency telephone number	_
Ireland United Kingdom Europe	NPIC - National Poison Information Centre Members of the Public: +353 (01) 8092166 (8.00 am to 10.00 pm - 7 days a week) Healthcare Professionals: +353 (01) 8092566 (24 hour service) Bostik: +44 (1785) 272650 (9am to 5pm Mon-Fri) 112
SECTION 2: Hazards identifi	cation

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1 - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)

2.2. Label elements

Contains Portland Cement

ARC DEEP LEVEL Supercedes date 02-Aug-2024 Revision date 02-Aug-2024 Revision Number 1



Signal word Danger

Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)

P101 - If medical advice is needed, have product container or label at hand

- P102 Keep out of reach of children
- P261 Avoid breathing dust

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves and eye/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

Cement product for which the amount of chromium VI was decreased to < 0,0002 % by a reduction agent (related to the total dry weight).

2.3. Other hazards

Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of developing lung disease. Product dust may be irritating to eyes, skin and respiratory system. Repeated exposure may cause skin dryness or cracking. When cement reacts with water a strong alkaline solution is produced. Prolonged contact with wet cement or wet concrete may cause serious burns because they develop without pain being felt e.g. when kneeling in wet cement even when wearing trousers.

PBT & vPvB

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No (EU	CAS No	Classification	Specific	M-Factor	M-Factor	REACH
	Index No).		according to	concentration limit		(long-ter	registration
			Regulation (EC) No.	(SCL)		m)	number
			1272/2008 [CLP]				

ARC DEEP LEVEL Supercedes date 02-Aug-2024

Revision date 02-Aug-2024 **Revision Number** 1

Portland Cement	266-043-4	65997-15-1	STOT SE 3 (H335)	-	-	-	[5]
1 - <5 %			Skin Irrit. 2 (H315)				
			Eye Dam. 1 (H318)				
			Skin Sens. 1 (H317)				

Full text of H- and EUH-phrases: see section 16

NOTE [5] - This substance is exempted from registration according to the provisions of Article 2(7)(a) and Annex V of REACH

Acute Toxicity Estimate No information available

Chemical name	EC No (EU Index No)	CAS No.	Oral LD50 mg/kg	Dermal LD50 mg/kg	LC50 - 4 hour -	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Portland Cement	266-043-4	65997-15-1	-	-	-	-	-

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures			
4.1. Description of first aid measu	ires		
General advice	If medical advice is needed, have product container or label at hand. Take a copy of the Safety Data Sheet when going for medical treatment.		
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.		
Eye contact	Do not rub affected area. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult an ophthalmologist.		
Skin contact	Brush off loose particles from skin. Remove material from skin immediately. Take off contaminated clothing and wash it before reuse.		
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.		
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).		
4.2. Most important symptoms an	d effects, both acute and delayed		
Symptoms	Burning sensation. Itching. Rashes. Hives. Causes serious eye damage. Irritating to skin. Inhalation of dust in high concentration may cause irritation of respiratory system. Frequent inhalation of large quantities of cement dust over a long period of time		

increases the risk of developing lung disease. When cement reacts with water a strong

alkaline solution is produced. Prolonged contact with wet cement or wet concrete may cause serious burns because they develop without pain being felt e.g. when kneeling in wet cement even when wearing trousers.

No information available. Effects of Exposure

4.3. Indication of any immediate m	edical attention and special treatment needed			
Note to doctors	May cause sensitisation in susceptible persons. Treat symptomatically.			
SECTION 5: Firefighting mea	asures			
5.1. Extinguishing media				
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Unsuitable extinguishing media	No information available.			
5.2. Special hazards arising from t	he substance or mixture			
Specific hazards arising from the chemical	Product is or contains a sensitiser. May cause sensitisation by skin contact.			
Hazardous combustion products	Carbon oxides. Sulphur oxides. Silicon dioxide.			
5.3. Advice for firefighters				
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.			
SECTION 6: Accidental release measures				
6.1. Personal precautions, protections	ive equipment and emergency procedures			
Personal precautions	Avoid generation of dust. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required.			
Other information	Refer to protective measures listed in Sections 7 and 8.			
For emergency responders	Use personal protection recommended in Section 8.			
6.2. Environmental precautions				
Environmental precautions	Prevent product from entering drains. Do not allow to enter into soil/subsoil.			
6.3. Methods and material for cont	ainment and cleaning up			
Methods for containment	Cover powder spill with plastic sheet or tarp to minimise spreading and keep powder dry. Prevent dust cloud.			
Methods for cleaning up	Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.			
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.			
6.4. Reference to other sections				
Reference to other sections	See section 8 for more information. See section 13 for more information.			
SECTION 7: Handling and st	torage			
7.1 Precautions for safe handling				

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Avoid generation of dust. Use personal protection

Supercedes date 02-Aug-2024	Revision Number 1
	equipment. Take off contaminated clothing and wash it before reuse.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, in	cluding any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
7.3. Specific end use(s)	
Specific use(s) Building and construction work.	
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
Other information	Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

ARC DEEP LEVEL

Chemical name	European Union	Ireland	United Kingdom
Silica, amorphous	-	TWA: 6 mg/m ³	TWA: 6 mg/m ³
7631-86-9		TWA: 2.4 mg/m ³	TWA: 2.4 mg/m ³
		STEL: 18 mg/m ³	STEL: 18 mg/m ³
		STEL: 7.2 mg/m ³	STEL: 7.2 mg/m ³
Limestone	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³
1317-65-3		TWA: 4 mg/m ³	TWA: 4 mg/m ³
		STEL: 30 mg/m ³	STEL: 30 mg/m ³
		STEL: 12 mg/m ³	STEL: 12 mg/m ³
Calcium sulfate	-	TWA: 10 mg/m ³	
7778-18-9		STEL: 30 mg/m ³	
Portland Cement	-	TWA: 1 mg/m ³	TWA: 10 mg/m ³
65997-15-1		STEL: 3 mg/m ³	TWA: 4 mg/m ³
			STEL: 30 mg/m ³
			STEL: 12 mg/m ³
Dust	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³
RR-12364-8		TWA: 4 mg/m ³	TWA: 4 mg/m ³
			STEL: 30 mg/m ³
			STEL: 12 mg/m ³
Magnesium oxide (MgO)	-	TWA: 4 mg/m ³	TWA: 10 mg/m ³
1309-48-4		TWA: 5 mg/m ³	TWA: 4 mg/m ³
		TWA: 10 mg/m ³	STEL: 30 mg/m ³
		STEL: 10 mg/m ³	STEL: 12 mg/m ³
		STEL: 12 mg/m ³	
		STEL: 30 mg/m ³	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available. (PNEC)

8.2. Exposure controls

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Revision date 02-Aug-2024

ARC DEEP LEVEL Supercedes date 02-Aug-2024

Eye/face protection Hand protection	Wear safety glasses with side shields (or goggles). For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. Gloves made of plastic or rubber. Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Skin and body protection	Avoid contact with skin, eyes or clothing. Wear appropriate personal protective clothing to prevent skin contact.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Avoid generation of dust. Possible nuisance dust.
Recommended filter type:	Wear a respirator conforming to EN 140 with Type P2/P3 filter or better.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid	
Appearance	Powder	
Colour	Grey	
Odour	Characteristic.	
Property	Values	Remarks • Method
Melting point / freezing point	Not applicable .	None known
Initial boiling point and boiling	Not applicable .	None known
range		
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Flash point	Not applicable .	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
рН	No data available	None known.
pH (as aqueous solution)	> 11	solution (20 %)
Kinematic viscosity	Not applicable .	None known
Dynamic viscosity	Not applicable .	
Water solubility	Reacts with water. Cement based	None known
	products react and solidify in contact	
	with water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	
9.2. Other information		
Solid content (%)	100	
Softening point	Not relevant	
VOC content	No data ava	ailable

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available Not applicable .

SECTION 10: Stability and re	eactivity
10.1. Reactivity	
Reactivity	Product cures with moisture.
10.2. Chemical stability	
Stability	Keep away from Incompatible materials. Stable under recommended storage conditions.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
10.3. Possibility of hazardous reac	tions
Possibility of hazardous reactions	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	Product cures with moisture.
10.5. Incompatible materials	
Incompatible materials	Strong acids. Strong bases. Strong oxidising agents. Acids. Aluminium.
10.6. Hazardous decomposition pr	oducts
Hazardous decomposition products	None under normal use conditions. Stable under recommended storage conditions.
SECTION 11: Toxicological i	nformation
11.1. Information on hazard class	es as defined in Regulation (EC) No 1272/2008
Information on likely routes of exp	osure
Product Information	
Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of

Innalation	respiratory tract.	
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.	
Skin contact	Specific test data for the substance or mixture is not available. May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.	
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.	
Symptoms related to the physical, chemical and toxicological characteristics		
Symptoms	Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes.	

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)>2000mg/kgATEmix (dermal)>2000mg/kgATEmix (inhalation-gas)>20000ppmATEmix (inhalation-dust/mist)>5mg/lATEmix (inhalation-vapour)>20mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50		
Portland Cement	LD50 >2000 mg/Kg (Rattus)	LD50 >2000 mg/Kg	-		
Delayed and immediate effects as well as chronic effects from short and long-term exposure					
Skin corrosion/irritation	Classification based on d	Classification based on data available for ingredients. Causes skin irritation.			
Serious eye damage/eye irritat	ion Classification based on da damage.	· · · · · · · · · · · · · · · · · · ·			
Respiratory or skin sensitisati	on May cause an allergic ski	May cause an allergic skin reaction.			
Germ cell mutagenicity	Based on available data,	the classification criteria are not	met.		
Carcinogenicity	Based on available data,	the classification criteria are not	met.		
Reproductive toxicity	Based on available data,	Based on available data, the classification criteria are not met.			
STOT - single exposure	May cause respiratory irri mixture.	May cause respiratory irritation. Classification based on individual ingredients of the mixture.			
STOT - repeated exposure Based on available data, the classification criteria are not met.			met.		
Aspiration hazard	Based on available data,	Based on available data, the classification criteria are not met.			
11.2. Information on other hazards					
11.2.1. Endocrine disrupting properties					
Endocrine disrupting propertie	es No information available.				
11.2.2. Other information					
Other adverse effects	No information available.				
SECTION 12: Ecological information					

ARC DEEP LEVEL Supercedes date 02-Aug-2024

12.1. Toxicity

Ecotoxicity

12.2. Persistence and degradability			
Persistence and degradability	No information available.		
12.3. Bioaccumulative potential			
Bioaccumulation	There is no data for this product.		
12.4. Mobility in soil			
Mobility in soil 12.5. Results of PBT and vPvB as	No information available.		
PBT and vPvB assessment	The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.		
12.6. Endocrine disrupting prope	erties		

Endocrine disrupting properties No information available.

12.7. Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
European Waste Catalogue	 17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 10 13 06 particulates and dust (except 10 13 12 and 10 13 13) Cured product can be treated as construction waste. In the management of larger quantities consult with local authorities and local waste disposal company 10 13 14 waste concrete and concrete sludge
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)				
14.1 UN	number or ID number	Not regulated		
14.2 UN	proper shipping name	-		
	nsport hazard class(es)	Not regulated		
14.4 Pac	cking group	Not regulated		

ARC DEEP LEVEL Supercedes date 02-Aug-2024

14.5 Environmental hazards 14.6 Special precautions for user	Not applicable
Special Provisions	None
IMDG	
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	NP
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk	
according to IMO instruments	
Transport in bulk according to	Annex II of MARPOL and the IBC Code Not applicable
Air transport (ICAO-TI / IATA-DGR)	
14.1 UN number or ID number	Not regulated
	Net regulated

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	
S	pecial Provisions	None

Section 15: REGULATORY INFORMATION

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

European Union

Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No.	Restricted substance per REACH Annex XVII
Portland Cement	65997-15-1	Use restricted. See entry 47.

47 where product supplied with reducing agent the packaging must be marked with the storage conditions and storage period appropriate to maintaining the activity of the reducing agent to keep the content of soluble chromium VI below 2mg/Kg.

Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Export Notification requirements

This product does not contain substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals above the level that triggers a labeling obligation under Regulation (EC) No 1272/2008. Therefore this product is not subject to prior informed consent notification.

ARC DEEP LEVEL Supercedes date 02-Aug-2024

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

Persistent Organic Pollutants Not applicable

REGULATION (EU) 2019/1148 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on the marketing and use of explosives precursors Not applicable

National regulations

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eve damage

H335 - May cause respiratory irritation

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT RE: Specific target organ toxicity - Repeated exposure STOT SE: Specific target organ toxicity - Single exposure

EWC: European Waste Catalogue

LOW: List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IATA: International Air Transport Association

ICAO: ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG: International Maritime Dangerous Goods

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

Legend SECTION 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
AGW	Occupational exposure limit value	BGW	Biological limit value
Ceiling	Maximum limit value	Sk*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method

ARC DEEP LEVEL Supercedes date 02-Aug-2024

STOT - single exposure	On basis of test data	
STOT - repeated exposure	Calculation method	
Acute aquatic toxicity	Calculation method	
Chronic aquatic toxicity	Calculation method	
Aspiration hazard	Calculation method	
Ozone	Calculation method	

Key literature references and sources for data used to compile the SDS

European Food Safety Authority (EFSA) European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC) European Chemicals Agency (ECHA) (ECHA_API) Environmental Protection Agency Acute Exposure Guideline Level(s) (AEGL(s)) International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) NIOSH (National Institute for Occupational Safety and Health) Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme Organisation for Economic Co-operation and Development Screening Information Data Set Product Safety & Regulatory Affairs **Prepared By Revision date** 02-Aug-2024 **Training Advice** No information available **Further information** No information available

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet