Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

SECTION 1: Identification of the substance/mixture and of the company/ undertaking - 1.1 Product identifier - Trade name: DURAHIT Crystal Ad 1000 (DM) - Article number: 3650 - 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. - Application of the substance / the mixture Construction chemicals - 1.3 Details of the supplier of the safety data sheet - Manufacturer/Supplier: Ha-Be Betonchemie GmbH Stuevestrasse 39 31785 HAMELN, GERMANY - Further information obtainable from: info@ha-be.com - 1.4 Emergency telephone number: 0049 5151 587-0 Only available during office hours. **SECTION 2: Hazards identification** - 2.1 Classification of the substance or mixture - Classification according to Regulation (EC) No 1272/2008 GHS05 corrosion Eye Dam. 1 H318 Causes serious eye damage. GHS07 H315 Causes skin irritation. Skin Irrit. 2 Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation. - 2.2 Label elements - Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. - Hazard pictograms GHS05 GHS07 - Signal word Danger - Hazard-determining components of labelling: Portland cement (< 1% quartz) Flugasche - Hazard statements H315 Causes skin irritation. H318 Causes serious eve damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. - Precautionary statements Avoid breathing dust/fume/gas/mist/vapours/spray. P261 P264 Wash thoroughly after handling. (Contd. on page 2) GB

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

Trade name: DURAHIT Crystal Ad 1000 (DM)

	(Contd. of page 1)			
P271	Use only outdoors or in a well-ventilated area.			
P272	Contaminated work clothing should not be allowed out of the workplace.			
P280	Wear protective gloves / eye protection / face protection.			
P302+P352	IF ON SKIN: Wash with plenty of water.			
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.			
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/doctor.			
P321	Specific treatment (see on this label).			
P362+P364	Take off contaminated clothing and wash it before reuse.			
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.			
P403+P233	Store in a well-ventilated place. Keep container tightly closed.			
P405	Store locked up.			
P501	Dispose of contents/container in accordance with local/regional/national/international			
	regulations.			
2.3 Other hazards				
Results of PBT and vPvB assessment				

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures

- Description:

mixture contains following components:

Mixture of substances listed below with nonhazardous additions.

- Dangerous components:				
	Portland cement (< 1% quartz)	0-50%		
EINECS: 266-043-4	♦ Eye Dam. 1, H318; ♦ Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335			
CAS: 497-19-8	sodium carbonate	0-10%		
EINECS: 207-838-8	♦ Eye Irrit. 2, H319			
CAS: 68475-76-3	Flugasche	≤2.5%		
	♦ Eye Dam. 1, H318;			

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- After inhalation:

Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints. Take affected persons into fresh air and keep quiet. - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: Have the mouth rinsed with water and spit out.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

GB -

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

(Contd. of page 2)

Trade name: DURAHIT Crystal Ad 1000 (DM)

- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Avoid formation of dust. Ensure adequate ventilation

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Prevent formation of dust.
- Information about fire and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

65997-15-1 Portland cement (< 1% quartz)

WEL Long-term value: 10* 4** mg/m³

*inhalable dust **respirable dust

- Regulatory information WEL: EH40/2018
- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing

(Contd. on page 4)

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

Trade name: DURAHIT Crystal Ad 1000 (DM)

Wash hands before breaks and at the	(Contd. of page 3)					
Wash hands before breaks and at the end of work.						
Avoid contact with the eyes. Avoid contact with the eyes and skin.						
- Respiratory protection:						
Filter P1						
	tion use respiratory filter device. In case of intensive or longer					
 exposure use self-contained respirato Protection of hands: 	exposure use self-contained respiratory protective device.					
- Protection of hands:						
Protective gloves						
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.						
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/						
the chemical mixture. Selection of the glove material on cor	nsideration of the penetration times, rates of diffusion and the					
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation						
- Material of gloves						
	The selection of the suitable gloves does not only depend on the material, but also on further marks of					
	quality and varies from manufacturer to manufacturer. As the product is a preparation of several					
substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.						
- Penetration time of glove material						
The exact break through time has to l	be found out by the manufacturer of the protective gloves and has to					
be observed.						
- Eye protection:						
Tightly sealed goggles						
Tightly sealed goggles						
Tightly sealed goggles	emical properties					
SECTION 9: Physical and che	· ·					
SECTION 9: Physical and che - 9.1 Information on basic physical a	· ·					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information	· ·					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form:	· ·					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour:	Powder Grey					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour:	and chemical properties Powder Grey Characteristic					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold:	And chemical properties Powder Grey Characteristic Not determined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour:	and chemical properties Powder Grey Characteristic					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition	And chemical properties Powder Grey Characteristic Not determined. Not applicable.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling rate	Powder Grey Characteristic Not determined. Not applicable. Undetermined. ange: Undetermined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling rate	Powder Grey Characteristic Not determined. Not applicable. Undetermined. ange: Undetermined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling rates - Flash point:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Inge: Undetermined. Not applicable.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling ra - Flash point: - Flammability (solid, gas):	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Not applicable. Not applicable. Not determined. Not determined. Not determined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling ra - Flash point: - Flammability (solid, gas): - Decomposition temperature: - Explosive properties:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Not applicable. Not applicable. Not determined. Not determined. Not determined. Not determined. Not determined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling ra - Flash point: - Flammability (solid, gas): - Decomposition temperature:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Not applicable. Not applicable. Not determined. Not determined. Not determined. Not determined. Not determined.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling ra - Flash point: - Flammability (solid, gas): - Decomposition temperature: - Explosive properties: - Explosion limits:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Not applicable. Not determined. Not determined. Not determined. Product does not present an explosion hazard.					
SECTION 9: Physical and che - 9.1 Information on basic physical a - General Information - Appearance: Form: Colour: - Odour: - Odour: - Odour threshold: - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling ra - Flash point: - Flammability (solid, gas): - Decomposition temperature: - Explosive properties: - Explosion limits: Lower:	And chemical properties Powder Grey Characteristic Not determined. Not applicable. Undetermined. Not applicable. Not determined. Not determined.					

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

Trade name: DURAHIT Crystal Ad 1000 (DM)

		(Contd. of page 4)
- Density: - Vapour density - Evaporation rate	Not determined. Not applicable. Not applicable.	
 Solubility in / Miscibility with water: 	Partly miscible.	
- Partition coefficient: n-octanol/water:	Not determined.	
- Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.	
Solids content: - 9.2 Other information	100.0 % No further relevant information available.	

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Possible in traces.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation
- Causes serious eye damage. - Respiratory or skin sensitisation
- May cause an allergic skin reaction.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- 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, the classification criteria are not met.
- STOT-single exposure
- May cause respiratory irritation.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: LC50 (96h) = 2,6 mg/L (Oncorhynchus mykiss) (ECHA)
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.

(Contd. on page 6)

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

Trade name: DURAHIT Crystal Ad 1000 (DM)

- Additional ecological information:

- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number - ADR, ADN, IMDG, IATA - 14.2 UN proper shipping name - ADR, ADN, IMDG, IATA - 14.3 Transport hazard class(es)	Void Void
- ADR, ADN, IMDG, IATA - Class - 14.4 Packing group - ADR, IMDG, IATA - 14.5 Environmental hazards:	Void Void
- Marine pollutant:	No Nat applicable
 - 14.6 Special precautions for user - 14.7 Transport in bulk according to Annex II Marpol and the IBC Code 	Not applicable. of Not applicable.
 Transport/Additional information: UN "Model Regulation": 	Not dangerous according to the above specifications. Void

SECTION 15: Regulatory information

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

- Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients is listed.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.

(Contd. of page 5)

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 30.04.2020

Version number 1.03

Revision: 30.04.2020

Trade name: DURAHIT Crystal Ad 1000 (DM)

(Contd. of page 6) - Relevant phrases H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. - Abbreviations and acronyms: Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Skin Sens. 1: Skin sensitisation – Category 1 Skin Sens. 1B: Skin sensitisation – Category 1B STOT SE 3: Specific target organ toxicity (single exposure) – Category 3