

Safety Data Sheet according to Regulation (EC) No 1907/2006

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DELTACAST CG-575 BULK

SDS No. : 364153 V002.6 Revision: 25.05.2018 printing date: 12.12.2018 Replaces version from: 21.01.2016

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

1.1. Product identifier

DELTACAST CG-575 BULK

Contains:

Silicic acid, sodium salt $> 1,6 \le 2,6$, solution

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use: Gravity die casting product

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA Henkelstr. 67 40589 Düsseldorf

Germany

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1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Serious eye damage H318 Causes serious eye damage.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Danger

Signal word:

Category 1

Hazard statement:	H318 Causes serious eye damage.
Precautionary statement:	P280 Wear 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. P310 Immediately call a POISON CENTER or doctor.

2.3. Other hazards

None if used properly. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Base substances of preparation:

Pigment Water silicate

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Silicic acid, sodium salt $> 1,6 \le 2,6$,	215-687-4	1-< 5%	Eye Dam. 1
solution	01-2119448725-31		H318
1344-09-8			Skin Irrit. 2
			H315

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Immediately wash skin thoroughly with soap and water.

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remain (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion: Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

Combustion behaviour:

Non-flammable (aqueous solution).

5.1. Extinguishing media

Suitable extinguishing media:

All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons: None known

5.2. Special hazards arising from the substance or mixture

May produce fumes like carbon dioxide when heated to decomposition.

5.3. Advice for firefighters

Wear protective equipment. Wear self-contained breathing apparatus.

Additional information:

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13. Remove with liquid-absorbing material (sand, peat, sawdust).

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid skin and eye contact. Ensure that workrooms are adequately ventilated. See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. The workplace should be equipped with an emergency shower and eye-rinsing facility.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction. Avoid strictly temperatures below + 5 $^{\circ}$ C and above + 60 $^{\circ}$ C.

7.3. Specific end use(s)

Gravity die casting product

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	ррт	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Titanium dioxide 13463-67-7		1,25	Exposure limit(s):		TRGS 900
Titanium dioxide 13463-67-7		10	Exposure limit(s):	2	TRGS 900
Titanium dioxide 13463-67-7			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Talc (Mg3H2(SiO3)4) 14807-96-6		1,25	Exposure limit(s):		TRGS 900
Talc (Mg3H2(SiO3)4) 14807-96-6		10	Exposure limit(s):	2	TRGS 900
Talc (Mg3H2(SiO3)4) 14807-96-6			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental	Exposure	Value	Value			Remarks
	Compartment	period					
			mg/l	ppm	mg/kg	others	
Silicic acid, sodium salt 1344-09-8	aqua (freshwater)		7,5 mg/l				
Silicic acid, sodium salt 1344-09-8	aqua (marine water)		1 mg/l				
Silicic acid, sodium salt 1344-09-8	aqua (intermittent releases)		7,5 mg/l				
Silicic acid, sodium salt 1344-09-8	sewage treatment plant (STP)		348 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Silicic acid, sodium salt 1344-09-8	Workers	dermal	Long term exposure - systemic effects		1,59 mg/kg	
Silicic acid, sodium salt 1344-09-8	Workers	Inhalation	Long term exposure - systemic effects		5,61 mg/m3	
Silicic acid, sodium salt 1344-09-8	General population	dermal	Long term exposure - systemic effects		0,8 mg/kg	
Silicic acid, sodium salt 1344-09-8	General population	Inhalation	Long term exposure - systemic effects		1,38 mg/m3	
Silicic acid, sodium salt 1344-09-8	General population	oral	Long term exposure - systemic effects		0,8 mg/kg	

Biological Exposure Indices: None

8.2. Exposure controls:

Engineering controls: Ensure good ventilation/suction at the workplace.

Respiratory protection:

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).

This recommendation should be matched to local conditions.

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR; ≥ 1 mm thickness) or natural rubber (NR; ≥ 1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; ≥ 1 mm thickness) or natural rubber (NR; ≥ 1 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection: Goggles which can be tightly sealed. Protective eye equipment should conform to EN166.

Skin protection: Suitable protective clothing Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical	9.1. Information on basic physical and chemical properties					
Appearance	paste					
	pasty					
	Milky white					
Odor	neutral					
Odour threshold	No data available / Not applicable					
pН	11,0 - 11,4					
(20 °C (68 °F))						
Melting point	No data available / Not applicable					
Solidification temperature	No data available / Not applicable					
Initial boiling point	No data available / Not applicable					
Flash point	No flash point up to 100 °C					
Evaporation rate	No data available / Not applicable					
Flammability	No data available / Not applicable					
Explosive limits	No data available / Not applicable					
Vapour pressure	No data available / Not applicable					
Relative vapour density:	No data available / Not applicable					
Density	1,320 g/cm3					
(20 °C (68 °F))						
Bulk density	No data available / Not applicable					
Solubility	No data available / Not applicable					
Solubility (qualitative)	Miscible					
(20 °C (68 °F); Solvent: Water)						

Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Viscosity (kinematic) Explosive properties Oxidising properties

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

None if used for intended purpose.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if used according to specifications.

10.5. Incompatible materials None if used properly.

tone if used property.

10.6. Hazardous decomposition products

None if used for intended purpose.

In case of fire toxic gases can be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	LD50	3.400 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Silicic acid, sodium salt >	LD50	> 5.000 mg/kg	rat	EPA OPPTS 870.1200 (Acute Dermal Toxicity)
1,6 <= 2,6, solution				
1344-09-8				

No data available / Not applicable No data available / Not applicable

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
Silicic acid, sodium salt >	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
1,6 <= 2,6, solution				
1344-09-8				

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	highly irritating		rabbit	In vitro

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Silicic acid, sodium salt > 1,6 <= 2,6, solution 1344-09-8	negative	oral: feed		mouse	OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Silicic acid, sodium salt >	NOAEL P > 159 mg/kg	multigenerat	oral:	rat	not specified
1,6 <= 2,6, solution		ion study	drinking		
1344-09-8		-	water		

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Silicic acid, sodium salt >	NOAEL 2.400 mg/kg	oral: feed	4 w	rat	OECD Guideline 407
1,6 <= 2,6, solution			daily		(Repeated Dose 28-Day
1344-09-8					Oral Toxicity in Rodents)

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water. Inorganic product: Decomposition not affected.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances		Value	Exposure time	Species	Method
CAS-No.	type				
Silicic acid, sodium salt $> 1,6$	LC50	1.108 mg/l	96 h	Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
<= 2,6, solution				Danio rerio)	Acute Toxicity Test)
1344-09-8					-

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silicic acid, sodium salt $> 1,6$	EC50	1.700 mg/l	48 h	Daphnia magna	OECD Guideline 202
<= 2,6, solution					(Daphnia sp. Acute
1344-09-8					Immobilisation Test)

Chronic toxicity to aquatic invertebrates

No data available.

Toxicity (Algae):

No data available.

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silicic acid, sodium salt $> 1,6$	EC0	> 348 mg/l	18 h		DIN 38412, part 8
<= 2,6, solution					(Pseudomonas
1344-09-8					Zellvermehrungshemm-
					Test)

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Silicic acid, sodium salt $> 1,6 \le 2,6$, solution 1344-09-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

If acidic or alkaline products are discharged into wastewater installations care must be taken that the discharged wastewater has a pH in the range pH 6 - 10, as pH variations could cause disorders in wastewater channels and biological sewage treatment plants. The local discharge regulations take precedence.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you. 080120

	SECTION 14: Transport information
14.1.	UN number
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.2.	UN proper shipping name
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.3.	Transport hazard class(es)
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.4.	Packing group
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.5.	Environmental hazards
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.6.	Special precautions for user
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.7.	Transport in bulk according to Annex II of Marpol and the IBC Code
	not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture VOC content 0 % (2010/75/EU)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK:	WGK = 1, slightly water endangering product. Classification according to the mixture rules in German VwVwS regulation annex 4 from 27.July 2005
WGK:	WGK = 1, slightly water endangering mixture. Classification according to the mixture rules in German AwSV regulation annex 1, number 5.2 from 18. April 2017.

Storage class according to TRGS 510: 10

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H315 Causes skin irritation.

H318 Causes serious eye damage.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.