

according to Regulation (EC) No. 1907/2006

## **MASTERSAFE ZP 19-20C**

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	11.12.2019	102000028185	Date of first issue: 06.09.2017

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

#### 1.1 Product identifier

Trade name : MASTERSAFE ZP 19-20C

Product code : 023418FA0CN

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

This information is not available.

#### 1.3 Details of the supplier of the safety data sheet

Company

E-mail address of person	:	msds.eckart@altana.com
responsible for the SDS		

#### 1.4 Emergency telephone number

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

Not a dangerous substance according to GHS.

#### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

#### 2.3 Other hazards

**Combustible Solids** 

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

#### Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	REGULATION (EC)	(% w/w)
	Index-No.	No 1272/2008	
	Registration number		



according to Regulation (EC) No. 1907/2006

## MASTERSAFE ZP 19-20C

Version	Revision Date: 11.12.2019	SDS Number:	Print Date: 06.08.2020		
2.0		102000028185	Date of first issue: 06.09.2017		
alumin	ium powder (stabilised)	7429-90-5 231-072-3 01-2119529243-4	Flam. Sol. 1; H228	>= 50 - <= 100	

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice	:	Move the victim to fresh air.
		No hazards which require special first aid measures.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with soap and plenty of water.
In case of eye contact	:	Remove contact lenses. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

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

None known.

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

This information is not available.

#### **SECTION 5: Firefighting measures**

5.1 Extinguishing media Suitable extinguishing media	:	Dry sand Special powder against metal fire
Unsuitable extinguishing media	:	ABC powder Carbon dioxide (CO2) Water Foam

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during : Contact with water liberates extremely flammable gas



according to Regulation (EC) No. 1907/2006

## MASTERSAFE ZP 19-20C

Versior 2.0	n Revision Date: 11.12.2019	SD 102	S Number: 2000028185	Print Date: 06.08.2020 Date of first issue: 06.09.2017				
fire	efighting		(hydrogen).					
5.3 Adv	5.3 Advice for firefighters							
Sp for	Special protective equipment for firefighters		Wear self-contain necessary.	ed breathing apparatus for firefighting if				
Fu	Irther information	:	Standard procedu Use extinguishing circumstances and	re for chemical fires. measures that are appropriate to local d the surrounding environment.				

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment.
		Evacuate personnel to safe areas.
		Avoid dust formation.

#### 6.2 Environmental precautions

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Use mechanical handling equipment.	
			Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For personal protection see section 8.

#### **SECTION 7: Handling and storage**

7.1 Precautions for safe handling Advice on safe handling	ng :	Avoid creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Store away from heat. For personal protection see section 8.
		Smoking, eating and drinking should be prohibited in the application area.
Advice on protection against fire and explosion	t :	Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures	:	General industrial hygiene practice.



according to Regulation (EC) No. 1907/2006

## MASTERSAFE ZP 19-20C

Version 2.0	Revision Date: 11.12.2019	SD 10	0S Number: 2000028185	Print Date: 06.08.2020 Date of first issue: 06.09.2017	
<b>7.2 Conditions for safe storage, i</b> Requirements for storage areas and containers		incl :	uding any incompatibilities Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignitior - No smoking. Keep container closed when not in use. Electrical installations / working materials must comply with		
Fur	ther information on age conditions	:	the technological Protect from hum	safety standards. idity and water.	
Adv	vice on common storage	:	Do not store near Do not store toge Never allow produ storage. Keep away from o materials.	acids. ther with oxidizing and self-igniting products. uct to get in contact with water during oxidizing agents and strongly acid or alkaline	
Fur stor	ther information on age stability	:	No decomposition	n if stored and applied as directed.	

### 7.3 Specific end use(s)

This information is not available.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis		
aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40		
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.					
	TWA 4 mg/m3 GB E (Respirable)					
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used					
		TWA (inhalable	10 mg/m3	GB EH40		

according to Regulation (EC) No. 1907/2006



## **MASTERSAFE ZP 19-20C**

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	11.12.2019	102000028185	Date of first issue: 06.09.2017

	dust)		
Further information	dust) For the purposes of these limits those fractions of airborne dust undertaken in accordance with the General methods for sampling a thoracic and inhalable aerosols, hazardous to health includes du concentration in air equal to or g inhalable dust or 4 mg.m-3 8-ho any dust will be subject to COSI these levels. Some dusts have b to these must comply with the a contain particles of a wide range fate of any particular particle aft and the body response that it el particle. HSE distinguishes two termed 'inhalable' and 'respirabl fraction of airborne material that and is therefore available for de dust approximates to the fractio of the lung. Fuller definitions and MDHS14/4., Where dusts contai WEL, all the relevant limits shou short-term exposure limit is liste exposure limit should be used.	, respirable dust and inhalable which will be collected when a the methods described in MD and gravimetric analysis or res The COSHH definition of a s st of any kind when present a greater than 10 mg.m-3 8-hou our TWA of respirable dust. Th HH if people are exposed to co been assigned specific WELs ppropriate limits., Most indust a of sizes. The behaviour, dep er entry into the human respirations for limit-setting e'., Inhalable dust approximate the nose and mouth of position in the respiratory trace in that penetrates to the gas e d explanatory material are giv in components that have their ald be complied with., Where the d, a figure three times the lon	e dust are sampling is HS14/4 spirable, ubstance at a in TWA of his means that dust above and exposure trial dusts position and ratory system, hd size of the purposes tes to the during breathing ct. Respirable xchange region ren in r own assigned ho specific ig-term
	TWA (Respirable	4 mg/m3	GB EH40
Further information	For the purposes of these limits those fractions of airborne dust undertaken in accordance with the General methods for sampling a thoracic and inhalable aerosols, hazardous to health includes du concentration in air equal to or g inhalable dust or 4 mg.m-3 8-ho any dust will be subject to COSI these levels. Some dusts have be to these must comply with the a contain particles of a wide range fate of any particular particle aft and the body response that it el particle. HSE distinguishes two termed 'inhalable' and 'respirabl fraction of airborne material that and is therefore available for de dust approximates to the fraction of the lung. Fuller definitions and MDHS14/4., Where dusts contain WEL, all the relevant limits should short-term exposure limit is liste exposure limit should be used.	, respirable dust and inhalable which will be collected when s the methods described in MD and gravimetric analysis or res The COSHH definition of a s st of any kind when present a greater than 10 mg.m-3 8-hou our TWA of respirable dust. The H if people are exposed to co been assigned specific WELs ppropriate limits., Most indust e of sizes. The behaviour, dep er entry into the human respiration size fractions for limit-setting e'., Inhalable dust approximate e enters the nose and mouth of position in the respiratory trace in that penetrates to the gas e d explanatory material are giv in components that have thei ald be complied with., Where a	e dust are sampling is HS14/4 spirable, ubstance at a rr TWA of his means that dust above and exposure trial dusts position and ratory system, hd size of the purposes tes to the during breathing ct. Respirable xchange region ren in r own assigned no specific ig-term



according to Regulation (EC) No. 1907/2006

## **MASTERSAFE ZP 19-20C**

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	11.12.2019	102000028185	Date of first issue: 06.09.2017

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health	Value
			effects	
aluminium powder (stabilised)	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic effects	3.95 mg/kg
	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

#### 8.2 Exposure controls

#### Personal protective equipment

Eye protection	:	Safety glasses
Hand protection Material	:	Protective gloves
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.
Skin and body protection	:	Long sleeved clothing
Respiratory protection	:	Use suitable breathing protection if workplace concentration requires. Breathing apparatus with filter. P1 filter
		No personal respiratory protective equipment normally required.
	440	

#### **Environmental exposure controls**

Water

The product should not be allowed to enter drains, water courses or the soil.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

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Appearance	•	:	pellets

Colour

according to Regulation (EC) No. 1907/2006



## **MASTERSAFE ZP 19-20C**

Ver: 2.0	sion	Revision Date: 11.12.2019	SD 102	S Number: 2000028185	Print Date: 06.08.2020 Date of first issue: 06.09.2017
	Odour		:	odourless	
	Odour	Threshold	:	No data available	9
	рН		:	No data available	)
	Melting	point/range	:	100 - 120 °C	
	Boiling	point/boiling range	:	Not applicable	
	Flash p	point	:	Not applicable	
	Evapor	ation rate	:	No data available	9
	Flamm	ability (solid, gas)	:	Combustible Soli	ds
	Self-igr	nition	:	No data available	)
	Auto-ig	nition temperature	:	No data available	)
	Smolde	ering temperature	:	No data available	)
	Decom	position temperature	:	No data available	9
	Explosi	ive properties	:	No data available	9
	Oxidizi	ng properties	:	No data available	9
	Upper of flamma	explosion limit / Upper ability limit	:	No data available	)
	Lower of flamma	explosion limit / Lower ability limit	:	No data available	9
	Vapour	pressure	:	No data available	9
	Relativ	e vapour density	:	No data available	9
	Relativ	e density	:	No data available	9
	Density	/	:	No data available	9
	Bulk de	ensity	:	No data available	9
	Solubili Wat	ity(ies) er solubility	:	insoluble	
	Solubili	ity in other solvents	:	No data available	9
	Partitio octanol	n coefficient: n- l/water	:	No data available	9



according to Regulation (EC) No. 1907/2006

## MASTERSAFE ZP 19-20C

Versi 2.0	ion Revision Date: 11.12.2019	SDS Number: 102000028185	Print Date: 06.08.2020 Date of first issue: 06.09.2017	
	Decomposition temperature	: No data availat	ble	
Viscosity, dynamic		: No data available		
Viscosity, kinematic		: No data available		
Flow time		: No data available		
9.2 C	Other information			

No data available

### **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No decomposition if stored and applied as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions	:	Contact with acids and alkalis may release hydrogen.
		Stable under recommended storage conditions.
		Dust may form explosive mixture in air.
10.4 Conditions to avoid		

Conditions to avoid	:	No data available
Conditions to avoid	:	No data availab

#### 10.5 Incompatible materials

Materials to avoid : Acids Bases

Bases Oxidizing agents Water

### **10.6 Hazardous decomposition products**

Contact with water or humid	: This information is not available.
air	

Thermal decomposition : This information is not available.



according to Regulation (EC) No. 1907/2006

## MASTERSAFE ZP 19-20C

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	11.12.2019	102000028185	Date of first issue: 06.09.2017

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### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

#### Acute toxicity

**Components:** 

#### aluminium powder (stabilised):

Acute inhalation toxicity

LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist

#### **Further information**

Product: Remarks: No data available

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data available

#### 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

### Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

#### 12.6 Other adverse effects

#### Product:

Additional ecological : No da information	ta available
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### **SECTION 13: Disposal considerations**

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

according to Regulation (EC) No. 1907/2006



## **MASTERSAFE ZP 19-20C**

Versio 2.0	on Revision Date: 11.12.2019	SE 10	S Number: 2000028185	Print Date: 06.08.2020 Date of first issue: 06.09.2017
European Waste Catalogue		:	10 03 21 - other particulates and dust (including ball-mill dust) containing hazardous substances	
13.1 Waste treatment methods				
Product		:	In accordance with local and national regulations.	
Contaminated packaging		:	Empty containers should be taken to an approved waste handling site for recycling or disposal. In accordance with local and national regulations.	

#### **SECTION 14: Transport information**

- 14.1 UN number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user

Remarks

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

:

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

REACH - Candidate List of Substances of Very High : Not applicable Concern for Authorisation (Article 59).

#### 15.2 Chemical safety assessment

### **SECTION 16: Other information**

Full text of H-Statements					
H228 :	Flammable solid.				
Full text of other abbreviations					
Flam. Sol. :	Flammable solids				
GB EH40 :	UK. EH40 WEL - Workplace Exposure Limits				

according to Regulation (EC) No. 1907/2006



## MASTERSAFE ZP 19-20C

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	11.12.2019	102000028185	Date of first issue: 06.09.2017

#### GB EH40 / TWA

: Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation: Regulation (EC) No 1272/2008: CMR - Carcinogen. Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail: SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### Further information

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.

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