

MATERIAL SAFETY DATA SHEET

According to Reg. 1907/2006/EC, Reg. 543/2010/EC and Dir. 67/548/EC

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name	RG - FLAP WHEELS ON SHAFT
Use of the product	Abrasive material for mechanical industry
Company name:	BIBIELLE S.p.A.
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2 HAZARDS IDENTIFICATION

Classification	The product is classified not hazardous according to Reg. 1272/2008/CE and to Dir 67/548/EC
Hazards for Human	No relevant hazards for human
Hazards for the environment	No relevant hazards for the environment
Physical or chemical hazards	No relevant physical or chemical hazards

3 COMPOSITION / INFORMATION ON INGREDIENTS

Material is composed of abrasive powders supported on an inert matrix of nylon by a polymerized synthetic binder

Abrasive material

Matrix	Substance	Hazard symbol		Classification		CAS N.	EC N.	% by weight**
		Reg. 1272/2008/CE	Dir. 67/548/CE	Reg. 1272/2008/CE	Dir. 67/548/CE			
Abrasive powders	Corundum* (Al ₂ O ₃)	---	---	---	---	1344-28-1	215-691-6	30 - 60
	Silicon carbide (CSi)	---	---	---	---	409-21-2	206-991-8	
	Zirconium dioxide (ZrO ₂)	---	---	---	---	1314-23-4	215-227-2	

Structural support

Matrix	Structural component	Hazard symbol		Classification		CAS N.	EC N.	% by weight**
		Reg. 1272/2008/EC	Dir. 67/548/EC	Reg. 1272/2008/EC	Dir. 67/548/EC			
Support	Cotton fibres	none		---		n.a.	n.a.	5 - 10
	Polyester fibres	none		---		n.a.	n.a.	5 - 10
Binder	Polymerized Synthetic Resin	none		---		n.a.	n.a.	10 - 20
Shaft	Zinc coated stainless steel	none		---		n.a.	n.a.	5 - 10

*: Corundum is a natural form of aluminium oxide; it contains small impurities of iron, magnesium and silica

** : any uncertain range concerning % amount of any component does not influence the hazard classification of the material, according to Reference Regulation






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4 FIRST AID MEASURES	
Preamble	Following statements must be taken as base-rules concerning abrasive materials and has to be completed according to safety data sheets of processed materials and process cooling liquid used
General informations	In case of eyes and skin contact, give priority to eyes first aid measures
Eye contact	Rinse opened eye for several minutes under running water and seek immediate medical advice, showing this MSDS
Skin contact	Remove contaminated clothes. Immediately wash with water and soap and rinse thoroughly.
Inhalation	Supply fresh air; consult doctor in case of complaints
Swallowing	No negative effects in case of swallowing. Drink water and seek immediate medical advice, showing this MSDS
5 FIRE FIGHTING MEASURES	
Suitable extinguishing agents	CO ₂ , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam
Protective equipment	Ordinary protective equipment in case of fire-fighting
Specific risks	None
6 ACCIDENTAL RELEASE MEASURES	
Person-related safety precautions	n.a.
Measures for environmental protection	
Measures for cleaning/collecting	
7 HANDLING AND STORAGE	
Handling	Avoid direct contact using recommended handling safety equipment (see § 8). According to normal use conditions, product does not contain volatile components.
Storage	Keep in cool, dry, ventilated storage in closed original containers. Do not drinking or eating near the storage place.
8 EXPOSURE CONTROLS / PERSONAL PROTECTION	
Risk scenario	Any risk concerning the use in mechanical industry Experimental toxicological data are not available concerning specific exposure scenarios. Hazard classification of this product was done according to Reg. 1272/2008/EC and other available informations
Information about design of technical facilities	Ensure good ventilation/exhaustion at the workplace. Safety washing water must be available for skin and eyes

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Exposure limit values	Substance	OSHA 2010 TWA [mg/m ³]		ACGIH 2010 TWA [mg/m ³]	
		Total	Respirable fraction	Inhalable fraction	Respirable fraction
	<i>Silicon carbide</i>	15	5	10	3
	<i>Corundum [Al₂O₃]</i>	15	5	---	---
	<i>Zirconium dioxide [as Zr] ACGIH carcinogenicity A4)</i>	5 mg/m ³ (TWA, ACGIH 2010) 10 mg/m ³ (STEL, ACGIH 2010) 5 mg/m ³ (TWA, OSHA PEL 2010) 1 mg/m ³ (MAK - inhalable fraction)			
	<i>Particles not otherwise classified</i>	10 mg/m ³ inhalable fraction (TWA 8 h, ACGIH 2010) 3 mg/m ³ respirable fraction (TWA 8 h, ACGIH 2010)			
Respiratory protection	In case of brief exposure use respiratory filter device Protection factor: P3				
Eyes protection	Safety goggles or face shield 				
Hands protection	Protective gloves for chemical products, according to standard EN374; materials for long contact time 				
Skin protection	Use protective clothes and protective shoes  				
Other informations	Abrasive materials used are inert and cannot cause risks when correctly stored and managed. During use on machineries, they request safety precautions for workers. The most part of powder particles comes from the processed material and eventually from the cooling liquid. Consequently attention and safety precautionary measures on vapours and dusts environmental removing must be applied. Follow the local Safety Management standards and instructions.				

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid abrasive material
Odour	Odourless
PH	n.a.
Charge	n.a.
Boiling point	n.a.
Melting point	n.a.
Flash point	n.a.
Vapour pressure	n.a.
Water solubility at 20 °C	Not soluble

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Volatile organic chemicals (VOC)	No volatile chemicals (VOC) are present at detectable level
Ripartition coefficient n-octanol/water	n.a.

10 STABILITY AND REACTIVITY

Stability	Stable in normal handling and storage conditions
Conditions/materials to avoid	Keep away from strong oxidizers and electrostatic charges
Dangerous decomposition products	After overheating and drying, thermal decomposition at °T > 250 °C can produce dangerous vapours as carbon dioxide, carbon oxide and nitrogen oxides

11 TOXICOLOGICAL INFORMATIONS

Material is inert on structural matrix. Data are referring to used abrasive components

Carcinogenic effects:	Zirconium is classified in group 4 of ACGIH (see § 16)
Mutagenic effects:	n.a.
Acute toxicity	Al ₂ O ₃ (Corundum): > 5000 mg/Kg - DL50, oral rat CSi (Silicon Carbide): not available data ZrO ₂ (biossido di zirconio): > 8800 mg/Kg – DL50, oral, rat
Chronic toxicity	n.a.
Skin	Mechanical irritating effects
Inhalation	Irritating (superior respiratory system). Powders produced during use can cause respiratory irritating effects
Eyes	Mechanical irritating effects: symptoms can be irritating, reddening, damages of corneal surface, tearing. Powders produced during use can cause eyes irritating effects
Other negative effects	Other risks can be caused depending on the abrasion process material used

12 ECOLOGICAL INFORMATIONS

Ecological toxicity	Al ₂ O ₃ (Corundum): > 100 mg/l – 96 h, salmo trutta (long time acute toxicity) > 100 mg/l – 48 h, daphnia magna (long time acute toxicity) CSi (Silicon carbide): not available data ZrO ₂ (Zirconium dioxide): not available data
Mobility	n.a.
Biopersistency	n.a.
Biodegradability	n.a.
Potential of bioaccumulation	n.a.

13 DISPOSAL CONSIDERATIONS

Disposal recommendation	Recovery if possible. Waste and uncleaned packages must be disposed of in accordance with state and local environmental regulations.
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14 TRANSPORT INFORMATION

Transport classification and regulation	ONU number: n.a. ADR/RID: not regulated (road and railway) ICAO/IATA: not regulated (air transport) IMDG/IMO: nor regulated (maritime transport)
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15 REGULATORY INFORMATION		
Hazard labelling symbols	None	
Risk statements	None	
Precautionary statements (Dir. 67/548/CE)	S 22	Do not breathe dust
	S 39	Wear eye/face protection
Precautionary statements (Reg. 1272/2008/CE)	P 260	Do not breathe dust
	P 280	Wear protective gloves/eye/face protection
Other regulation references	<p>Reg. 1272/2008/EC 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</p> <p>Product does not contains substances classified carcinogenic cat. 1 or cat. 2</p>	

16 OTHER INFORMATIONS	
H/R – statements (full text) (§ 3)	---
Further informations and references	<p>Informations are updated to:</p> <p>Dir. 2009/2/EC - 31° update of Dir. 67/548/EC and according to Reg. 1907/2006/EC, Dir. 2001/58/EC and 1999/45/EC and Reg. 1972/2008/EC</p> <p>Reg. 1272/2008/EC (classification, labelling and packaging of substances and preparations) modifying directives 67/548/EC, 1999/45/EC and Reg. 1907/2006/EC</p> <p>NIOSH: Registry of toxic effects of chemical substances</p> <p>ACGIH: American Conference of Governmental Industrial Hygienists</p> <p>When applicable, according to Reg. 1907/2006/EC - chapter II, all substances used in this preparation where preregistered</p> <p>Product is according to Reg. 1907/2006/EC – title II requirements (registration of substances)</p> <p>Dir. 42/2006/CE (machineries directive): n.a.</p>

ABBREVIATIONS AND ACRONYMS

LD50	Average letal dose
TLV - TWA	Threshold Limit Value - Time Weighted Average
STEL	Short Term Exposure Limit
OES	Occupational Exposure Standard
REACH	Registration, Evaluation, Autorisation of Chemicals. Regulation 1907/2008/EC
ACGIH carcinogenicity A4	Not classifiable as a human carcinogen. Agents which cause cancer that they could be carcinogenic for humans but which cannot be assessed conclusively because of lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories
n.a.	Not applicable/Not available

DISCLAIMER

THIS PREPARATION MUST BE USED ONLY IN THE PROPER WAY FOR PROPER USE. THE INFORMATIONS CONTAINED IN THIS MSDS, AS OF THE ISSUE DATA, IS BELIEVED TO BE TRUE AND CORRECT. HOWEVER, THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND ANY RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT WARRANTY OR GUARANTEE. SINCE THE CONDITIONS OF USE ARE BEYOND THE CONTROL OF OUR COMPANY, IT IS THE RESPONSABILITY OF THE USER TO DETERMINE THE CONDITIONS OF SAFE USE OF THIS PRODUCT