

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
Product name	Shark Industries- Flap Discs	
Use of the product	Abrasive material for mechanical industry	
Company name:	Shark Industries	
Address:	6700 Bleck Drive, Rockford, MN 55373	
Telephone number:	800-537-4275	
Fax number:	763-565-1901	
E-mail	info@sharkind.com	
Emergency phone number:	1-800-424-9300	

2 HAZARDS IDENTIFICATION	
Classification	The product is classified not hazardous according to Reg. EC 1272/2008
Hazards to human	No relevant hazards to human
Hazards to the environment	No relevant hazards to 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 a structure of cotton/polyester tissue, with a burnished or zinc-coated stainless steel pivot. The product is binded by a polymeric inert matrix

Abrasive material

Matrix Substance	Hazard symbol		Classification				% by	
	Substance	Reg. EC 1272/2008	Dir. EC 67/548	Reg. EC 1272/2008	Dir. EC 67/548	CAS N.	EC N.	weight**
						1344-28-1	215-691-6	
Abrasive Corundum* (Al ₂ O ₃) powders	TSCA 8(b) inventory		Listed					
	RTECS BD1		1200000		100			
					1314-23-4	215-227-2		
	Zirconium dioxide (ZrO ₂)		TSCA 8(b) inventory		Listed			
			ECS	ZH8800000				

*: Corundum is a natural form of aluminium oxide; it contains small impurities of iron, magnesium and silica **: any differences on abrasive powder composition (% by weight) does not modify hazard classification of material according to reference Regulation

Structural	support
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Matrix	Structural component	Risk symbol	Classification
Cupport	Cotton fiber		
Support	Polyester fiber		
Binder	Inert polymeric binder film		
Buckle	Zinc coated iron plate		
Support fiber	Fiberglass (amorphous silica, cas n.: 65997-17-3)		



FIRST AID MEASURES 4 Following statements must be taken as base-rules concerning abrasive materials and has to be completed according to safety data sheets of processed materials Preamble and process cooling liquid used General informations In case of eyes and skin contact, give priority to eyes first aid measures Rinse opened eye for several minutes under running water and seek immediate Eye contact medical advice, showing this MSDS Remove contaminated clothes. Immediately wash with water and soap and rinse Skin contact thoroughly. Inhalation Supply fresh air; consult doctor in case of complaints No negative effects in case of swallowing. Drink water and seek immediate Swallowing medical advice, showing this MSDS

5 FIRE FIGHTING MEASURES	
Suitable extinguishing agents	$\ensuremath{\text{CO}_2}\xspace,$ 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
Specifical risks	None

6 ACCIDENTAL RELEASE MEASURES		
Person-related safety precautions		
Measures for environmental protection	Not applicable to the article	
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 specifical exposure scenarios. Hazard classification of this product was done according to Reg. EC 1272/2008 and other available informations					
Information about design of	Ensure good ventilation		-			
technical facilities	Safety washing water m	nust be available f	or skin and eye			
		OSHA 2014 TWA [mg/m ³]		ACGIH 2014 TWA [mg/m³]		
	Substance	Total	Respirable fraction	Inhalable fraction	Respirable fraction	
	Corundum [Al ₂ O ₃]	15	5			
Exposure limit values	Zirconium dioxide [as Zr] ACGIH carcinogenicity A4)		ACGIH 2010) _, ACGIH 2010) OSHA PEL 2010 - inhalable fractio			
	Synthetic vitreous fibers – glass wool fibers (ACGIH carcinogenicity A3)	TLW – TWA = 1 f/cc (ACGIH) respirable fibers: length > 5 μm aspect ratio \geq 3:1				
	Particles not otherwise classified					
	In ca	ase of brief expos	ure use respirato	ry filter device		
Respiratory protection	E CH					
		Safety goggles or face shield				
Eyes protection						
	Protective gloves for chemical products, according to standard EN374; materials for long contact time					
Hands protection						
	Use protective clothes and protective shoes					
Skin protection						
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.					
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MATERIAL SAFETY DATA SHEET

According to GHS – GLOBAL HARMONISED SYSTEM Reg. EC 1907/2006 and to Reg. EU 453/2010

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance	Solid abrasive material		
Odour	Odourless		
РН	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 $^{\circ}$	Not soluble		
Volatile organic chemicals (VOC)	No volatile chemicals (VOC) are present at detectable level		
Partition coefficient n-octanol/water	n.a.		

STABILITY AND REACTIVITY 10 Stability Stable in normal handling and storage conditions Conditions/materials to avoid Keep away from strong oxidizers and electrostatic charges After overheating and drying, thermical decomposition at $\Upsilon > 250$ can produce Dangerous decomposition products dangerous vapours as carbon dioxide, carbon oxide and nitrogen oxides

TOXICOLOGICAL INFORMATIONS 11

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 ZrO ₂ (ziconium dioxide): > 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) ZrO ₂ (Zirconium dioxide): not available data	
Mobility	n.a.	
Biopersistency	n.a.	
Biodegradability	n.a.	
Potential of bioaccumulation	n.a.	

13	DISPOSAL CONSIDERATIONS				
		Recovery if possible.			
Disposal recommendation		Waste and uncleaned packages must be disposed of in accordance with state			

		and local environmental regulations.	
14	TRANSPORT INFORMATION		
		ONIL number: n a	

	ONU HUMber. n.a.
Transport classification and	ADR/RID: not regulated (road and railway)
regulation	ICAO/IATA: not regulated (air transport)
	IMDG/IMO: nor regulated (maritime transport)

15 REGULATORY INFORMATION				
GHS Hazard labeling symbols		None		
UE Hazard labeling symbols		None		
U.S.A. OSHA labeling symbols		None		
CANADA WHIMIS labeling symbols		None		
GHS hazard statements		None		
UE hazard statements		None		
U.S.A. OSHA hazard statements		None		
CANADA WHIMIS hazard statements		None		
Precautionary statements		S 22	Do not breathe dust	
(Dir. EC 67/548)		S 39	Wear eye/face protection	
Precautionary statements		P 260	Do not breathe dust	
(Reg. EC 1272/2008)		P 280	Wear protective gloves/eye/face protection	



	All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act Chemical Substance Inventory (see section 3) Reg. EC 1272/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives EC 67/548 and EC 1999/45, and amending Reg. EC 1907/2006 (Reach)
Other regulation references	Product does not contains detectable amounts of: substances classified carcinogenic cat. I or cat. 2 substances included in the ECHA Candidate list of SVHC substances included in the Reach annex 14 (authorization) No restriction are applicable according to UE Reach Regulation (Annex 17 and following amendments)

16 OTHER INFORMATIONS				
GHS Hazard statements (full text) (§ 3)	R36/38 – Irritating to eyes and skin H315 – causes skin irritation H319 – causes serious eye irritation			
Further informations and references	Informations are updated to: GHS "Globally Harmonized System of Classification and Labelling of Chemicals, United Nations, 1 st Revised Edition 2005" ANSI Z400.1/Z129.1-2010 Hazard Evaluation and Safety Data Sheet and Precautionary Labeling Preparation Hazard Communication Standard 29 CFR 1910.1200 Reg. EC 1272/2008 and following amendments NIOSH: Registry of toxic effects of chemical substances ACGIH: American Conference of Governmental Industrial Hygienists, 2014 When applicable, according to Reg. 1907/2006/EC - chapter II, all substances used in this preparation where registered Product is according to Reg. 1907/2006/EC – title II requirements (registration of substances) Dir. EC 42/2006 (machineries directive): not applicable. Dir. EC 65/2011 (Rohs 2): not applicable			

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
ECHA	European Chemical Agency
RTECS	Registry of Toxic Effects of Chemical Substances (U.S.A.)
OSHA	Occupational Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
ACGIH	American Conference of Governmental Industrial Hygienists
TSCA	Toxic Substances Control Act
WHMIS	Workplace Hazardous Materials Information System (Canada)
OSHA	Occupational Safety and Health Administration
n.a.	Not applicable/Not available



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