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| **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](mailto:info@sharkind.com) |
| Emergency phone number: | 1-800-424-9300 |

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| **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**

**weight\*\***

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| **Matrix** | **Substance** | **Hazard symbol** | | **Classification** | | **CAS N.** | **EC N.** | **% by** |
| **Reg. EC**  **1272/2008** | **Dir. EC**  **67/548** | **Reg. EC**  **1272/2008** | **Dir. EC**  **67/548** |
| Abrasive powders | Corundum\* (Al2O3) | --- | --- | --- | --- | 1344-28-1 | 215-691-6 | 100 |
| TSCA 8(b) invent ory | | Listed | | | |
| RTECS | | BD1200000 | | | |
| Zirconium dioxide  (ZrO2) | --- | --- | --- | --- | 1314-23-4 | 215-227-2 |
| TSCA 8(b) invent ory | | Listed | | | |
| RTECS | | 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**

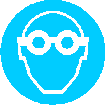
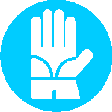
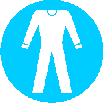
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| **Matrix** | **Structural component** | **Risk symbol** | **Classification** |
| Support | Cotton fiber | --- | --- |
| Polyester fiber | --- | --- |
| Binder | Inert polymeric binder film | --- | --- |
| Buckle | Zinc coated iron plate | --- | ---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

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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 |

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| **5 FIRE FIGHTING MEASURES** | |
| Suitable extinguishing agents | CO2, 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 |

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| **6 ACCIDENTAL RELEASE MEASURES** | |
| Person-related safety precautions | Not applicable to the article |
| Measures for environmental protection |
| Measures for cleaning/collecting |

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| **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. |



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| **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 technical facilities | Ensure good ventilation/exhaustion at the workplace.  Safety washing water must be available for skin and eyes | | | | |
| Exposure limit values |  | OSHA 2014  TWA [mg/m3] | | ACGIH 2014  TWA [mg/m3] | |
| Substance | Total | Respirable fraction | Inhalable fraction | Respirable fraction |
| *Corundum [Al2O3]* | 15 | 5 | --- | --- |
| *Zirconium dioxide [as Zr] ACGIH carcinogenicity A4)* | 5 mg/m3 (TWA, ACGIH 2010)  10 mg/m3 (STEL, ACGIH 2010)  5 mg/m3 (TWA, OSHA PEL 2010)  1 mg/m3 (MAK - inhalable fraction) | | | |
| *Synthetic vitreous fibers – glass wool fibers (ACGIH carcinogenicity A3)* | TLW – TWA = 1 f/cc (ACGIH) respirable fibers: length > 5 µm aspect ratio ≥ 3:1 | | | |
| *Particles not otherwise classified* | 10 mg/m3 inhalable fraction (TWA 8 h, ACGIH 2014)  3 mg/m3 respirable fraction (TWA 8 h, ACGIH 2014) | | | |
| Respiratory protection | In case of brief exposure use respiratory filter device | | | | |
| 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. | | | | |

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

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| **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, thermical 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

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| Carcinogenic effects: | Zirconium is classified in group 4 of ACGIH (see § 16) |
| Mutagenic effects: | n.a. |
| Acute toxicity | Al2O3 (Corundum): > 5000 mg/Kg - DL50, oral rat  ZrO2 (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 |

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| **12 ECOLOGICAL INFORMATIONS** | |
| Ecological toxicity | Al2O3 (Corundum):  > 100 mg/l – 96 h, salmo trutta (long time acute toxicity)  > 100 mg/l – 48 h, daphnia magna (long time acute toxicity) ZrO2 (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**

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** | |
| GHS Hazard labeling symbols | None |
| UE Hazard labeling symbols | None |
| U.S.A. OSHA labeling symbols | None |
| CANADA WHIMIS labeling symbols | None |

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| GHS hazard statements | None |
| UE hazard statements | None |
| U.S.A. OSHA hazard statements | None |
| CANADA WHIMIS hazard statements | None |

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| Precautionary statements  (Dir. EC 67/548) | **S 22** | Do not breathe dust |
| **S 39** | Wear eye/face protection |
| Precautionary statements  (Reg. EC 1272/2008) | **P 260** | Do not breathe dust |
| **P 280** | Wear protective gloves/eye/face protection |

Other regulation references

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)

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)

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| **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, 1st 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 |

**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*