

EMPIRE ABRASIVES, INC

SAFETY DATA SHEET

*Voluntary informative product safety data sheet (SVIP),
 according to GHS – GLOBAL HARMONISED SYSTEM, Reg. EC 1907/2006 and to Reg. EU 453/2010*

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name	Empire Abrasives – GRINDING DISCS
Description and use	Abrasive material rigid organic binder Use: grinding of metals
Company name	Empire Abrasives Inc
Address	1251 Humbracht Circle Unit C Bartlett IL 60103
Telephone number	630-372-8032
Fax number	630-372-8076
E-mail	
Emergency phone number	502-552-5226

2 HAZARDS IDENTIFICATION

Hazard classification of the product	The abrasive product is an article and cannot hazard classification according to Reg. EC 1272/2008 is not applicable. Risks about its use should be assessed by the safety management system of any downstream user
Labelling	This abrasive product is an article: labelling is not applicable according to Reg. 1272/2008/EC

3 COMPOSITION / INFORMATION ON INGREDIENTS

Abrasive material, binded in a thermosetting resin matrix

Abrasive material in polymeric matrix

Matrix	Substance	Hazard pictogram	Hazard classification	CAS N.	EC N.
		Reg. EC 1272/2008	Reg. EC 1272/2008		
Abrasive powders	Aluminum oxide Al ₂ O ₃	---	---	1344-28-1	215-691-6
		TSCA 8(b) inventory	Listed		
		RTECS	BD1200000		
	Iron oxide Fe ₂ O ₃	---	---	1309-37-1	215-168-2
		TSCA 8(b) inventory	Listed		
		RTECS	NO7400000		
	Pyrite FeS ₂	---	---	1309-36-0	215-167-7
		TSCA 8(b) inventory	Listed		
		RTECS	N.A.		
	Kalfren (Aluminum potassium fluoride)		Eye irrit 2 – H319 Acute tox 4 – H332 Lact – H362 STOT RE 1 – H372 Aquatic chronic 3 – H412	60304-36-1	262-153-2
		TSCA 8(b) inventory	Listed		
		RTECS	N.A.		
Barium carbonate BaCO ₃		Acute tox 2 – H302	513-77-9	208-163-3	
	TSCA 8(b) inventory	Listed			
	RTECS	CO8600000			

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Structural support

Matrix	Structural component	Hazard pictogram	Hazard classification
Binder	Inert thermosetted polymer	---	---

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 information	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 relevant 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	Not applicable to the article
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. 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

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Exposure limit values	Substance	OSHA 2014 TWA [mg/m ³]		ACGIH 2014 TWA [mg/m ³]	
		Total	Respirable fraction	Inhalable fraction	Respirable fraction
	<i>Aluminum oxide [Al₂O₃]</i>	15	5	---	---
	<i>Aluminum potassium fluoride</i>	2,5	---	2,5	---
	<i>Barium carbonate</i>	---	---	0,5	---
	<i>Particles not otherwise classified</i>	10 mg/m ³ inhalable fraction (TWA 8 h, ACGIH 2014) 3 mg/m ³ 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.				

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid abrasive material
Color	Black
Odor	Odorless
PH	Not applicable
Ionic charge	Not applicable
Boiling point	Not applicable
Melting point	Not applicable
Flash point	Not applicable

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Vapor pressure	Not applicable
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	No available data on this article

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 polymeric matrix. Data are referring to used abrasive components

Carcinogenic effects:	No carcinogenic effects are known and applicable
Mutagenic effects:	No mutagenic effects are known and applicable
Acute toxicity	Aluminum oxide: > 5000 mg/Kg - DL50, oral rat (IUCALID Data Sheet, European Chemical Bureau) Barium carbonate: 418 mg/Kg - DL50, oral rat (Sigma Aldrich)
Chronic toxicity	No chronic effects are known and applicable
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	Aluminum oxide > 100 mg/l – 96 ore, salmo trutta (acute toxicity) > 100 mg/l – 48 ore, daphnia magna (acute toxicity) Barium carbonate 6950 mg/l – 96 ore, gambusia affinis (acute toxicity)
Mobility	No available and applicable data about this abrasive article
Biopersistence	No available and applicable data about this abrasive article
Biodegradability	No available and applicable data about this abrasive article
Potential of bioaccumulation	No available and applicable data about this abrasive article

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: not applicable
	ADR/RID: not regulated (road and railway)
	ICAO/IATA: not regulated (air transport)
	IMDG/IMO: not 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 (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. 1 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)	H319 – causes serious eye irritation
	H332 - Harmful if inhaled
	H362 - May cause harm to breast-fed children
	H372 - Causes damage to organs
	H412 - Harmful to aquatic life with long lasting effects
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

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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

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