

SAFETY DATA SHEET

according to GHS and to OSHA HAZARD COMMUNICATION STANDARD

1	CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
1.1	Product name	SDR (Silicon Carbide) PROSTRIP discs with fiberglass backing
1.2	Description and use of the product	Abrasive discs with rigid fiberglass backing. Industrial and professional use. Do not use for other purposes
1.3	Company name	VSM Abrasives
	Address	1012 E Wabash St, O'Fallon, MO 63366
	Telephone number	+1 636 272 7432
	Fax number	+1 636 272 6394
	E-mail address of the competent person responsible for Safety Data Sheet	us.info@vsmabrasives.com

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2	HAZARDS IDENTIFICATION	
2.1	GHS Symbols and hazard labelling	
		
	PREAMBLE. SDR (PROSTRIP) ARE ABRASIVE ARTICLES. IT IS NOT A CHEMICAL MIXTURE, ACCORDING TO DEFINITIONS OF OSHA STANDARDS FOR HAZARD LABELING 1910.1200. "ARTICLE" MEANS A MANUFACTURED ITEM OTHER THAN A FLUID OR PARTICLE: (i) WHICH IS FORMED TO A SPECIFIC SHAPE OR DESIGN DURING MANUFACTURE; (ii) WHICH HAS END USE FUNCTION(S) DEPENDENT IN WHOLE OR IN PART UPON ITS SHAPE OR DESIGN DURING END USE; AND (iii) WHICH UNDER NORMAL CONDITIONS OF USE DOES NOT RELEASE MORE THAN VERY SMALL QUANTITIES, E.G., MINUTE OR TRACE AMOUNTS OF A HAZARDOUS CHEMICAL, AND DOES NOT POSE A PHYSICAL HAZARD OR HEALTH RISK TO EMPLOYEES	
	THIS SAFETY DATA SHEET APPLIES TO THE ABRASIVE MIXTURE IN THE ARTICLE ACCORDING TO OSHA AND GHS CLASSIFICATION CRITERIA	
	NOT HAZARDOUS	
2.2	NO GHS PICTOGRAM	
	Label elements	
	NOT HAZARDOUS, NO GHS PICTOGRAM	
	Substances to be indicated on the label	Not applicable
	Hazard statements	
	No hazard statements	
	Precautionary statements	
	P 260	Do not breathe dust
	P 280	Wear protective gloves/eye/face protection
2.3	Other hazards	
	Risks about its use should be assessed by the safety management system of any downstream user, concerning specific material abrasion processes	

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3	COMPOSITION / INFORMATION ON INGREDIENTS
3.1	Substances: not applicable
3.2	Mixtures: This product is an article containing abrasive substances on a specific shape of inert solid matrix

Abrasive material supported and binded

Matrix	Substance	Hazard pictogram	Hazard classification	CAS N.	% by weight
		HazCom (2024-06-26)			
Abrasive powder	Silicon carbide (CSi) No fibers of silicon carbide are used	---	---	409-21-2	55 ± 5
		TSCA 8(b) inventory	Listed		
		RTECS	VW0450000		

Structural support

Matrix	Structural component	Hazard pictogram	Hazard classification	CAS N.	% by weight
Binder	Inert polymeric film	No GHS pictogram	Not hazardous	9009-54-5	25 ± 5
Support	Nylon (Polyamide 6)	No GHS pictogram	Not hazardous	25038-54-4	20 ± 5

No additional ingredients, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, meet the PBT or vPvB criteria or are considered to be of equivalent concern substances or substances which It has been assigned a workplace exposure limit and hence require reporting in this section. No nano-materials are used

The upper limits of the ranges of concentration are excluded

Occupational exposure limits, if available, are listed in Section 8

4 FIRST AID MEASURES

Preamble. The following recommendations are basic rules when using the abrasives applied and must be supplemented by information on the safety data sheets of the working material and any eventual refrigerant used

Description of first aid measures, in the case of dust projections		
4.1	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
	Swallowing	Drink water and seek immediate medical advice, showing this MSDS
	Inhalation	Supply fresh air; consult doctor in case of complaints
	Other informations	Immediately remove contaminated clothing
Most important symptoms and effects, acute and delayed		
4.2	Potential acute health effects	No health-related episodes attributable to the product are known Eye contact: possible moderate and reversible irritation Inhalation: possible generalized malaise Skin contact: moderate and reversible irritation possible Ingestion: No known significant effects or critical hazards
Medical attention and special treatment		
4.3	Threat symptomatically. If ingested or inhaled (large amounts), immediately contact a poison control center. No specific treatments are known	

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5 FIRE FIGHTING MEASURES		
5.1	Suitable extinguishing agents	This abrasive material is not flammable. Abrasives substances are not combustible. Substances of the support material contain solid fuels (type A fireworks). In the event of a fire, the following extinguishing media may be used: carbon dioxide (CO ₂ , foam, chemical powders, in the case of very large fire extinguishing even spray water spray
5.2	Unsuitable extinguishing agents for safety reasons	None of the abrasive material, to be evaluated also in the context of the general context of use, of the materials subject to abrasion processes and resulting powders
5.3	Special hazards caused by the substance and its combustion products or resulting gases	In case of fire exposed at high temperatures the present organic substances may partially decompose and burn by releasing carbon oxides and other oxidized organic compounds
5.4	Protective equipment	Use protection for the respiratory tract. Cool fire exposed containers with water
5.5	Recommendations for Fire Extinguishers	Evacuate and isolate the area until complete fire extinction, by limiting access only to trained personnel. Firefighters must always wear appropriate protective equipment (helmet, boots, fireproof gloves and positive pressure self contained breathing apparatus with facial protective screen) [ref. NFPA 1971]. Prevent the contaminated extinguishing water flowing into drains or waterways
6 ACCIDENTAL RELEASE MEASURES		
6.1	Personal precautions, protective equipment and procedures in case of emergency	
	Person-related safety precautions	Not applicable for this abrasive article as such
	Measures for environmental protection	
	Additional informations	
6.2	Methods and materials for containment and cleaning	
	Measures for cleaning/collecting (small spill)	Not applicable for this abrasive article as such
	Measures for cleaning/collecting (large spill)	
6.3	Reference to other sections	
	Emergency telephone numbers	See section 1
	Protection devices individual	See section 8
	Waste treatment	See section 13
7 HANDLING AND STORAGE		
7.1	Handling	Wash hands thoroughly after handling the product, especially before drinking and / or eating. Avoid contact with eyes, do not breathe dust and aerosols, do not ingest. The product, used under the normal conditions of use recommended in the specific technical instructions, does not contain volatile compounds and does not require specific vapor capture systems, but precautions must be taken to produce dust during the abrasion process. Do not smoke, drink or eat during use. Provide near waterpoints 
7.2	Storage	Store in original packaging, closed and away from sources of heat. Use appropriate storage areas
7.3	Specific end use(s)	Abrasive discs with fiberglass backing. Industrial and professional use. Do not use for other purposes

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8	EXPOSURE CONTROLS / PERSONAL PROTECTION						
8.1	Control parameters						
	Exposure limit values	Component	USA OSHA 2024 TWA [mg/m³]		USA NIOSH 2024 TWA [mg/m³]		
			Inhalable fraction	Respirable fraction	Inhalable fraction	Respirable fraction	
		Silicon carbide	15	5	---	---	
	Not classified dust	10 mg/m³ inhalable fraction (TWA 8 hours, ACGIH 2024) 3 mg/m³ respirable fraction (TWA 8 hours, ACGIH 2024)					
	Hygiene and personal protective measures	For the handling and storage of abrasive material as such, no specific precautionary technical measures are required. During operation, refer to the operating instructions of the operating machines and the National Regulations and carefully observe the maximum operating speeds indicated. When using in mechanical machining, use a localized suction system according to the material being machined; It is preferable to have availability near an eye fountain					
8.2	Exposure control (depending also on the specific abrasion process method and related materials)						
	Respiratory protection	During use, consequently to the operational context and the possible formation of powders and aerosols, protect the respiratory tract by collective suction systems or individual devices (mask with a type a filter whose class (1, 2 or 3) must be choice in relation to the limit concentration of use. Use protection masks approved by the competent normation bodies, such as NIOSH					
	Eyes protection	During use, as a result of dust production, protect eyes with tested and approved devices according to the requirements of appropriate technical standards such as ANSI Z87.1					
	Hands protection	Leather or PVC working gloves (ASTM F739)					
	Thermal hazards	Not applicable in relation to the intended use. Wear heat-resistant gloves in case of thermal hazards					
	Skin protection	The use of protective clothing for the skin and body is not strictly necessary for normal use, but it is advisable to wear ordinary work clothing for general skin protection in relation to the use and associated risks assessed					 
Other informations	Keep away from foodstuffs. Wash hands thoroughly after handling the product. Keep working clothes separately. Immediately remove contaminated clothing. Follow the local Safety Management standards and instructions						

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9 PHYSICAL AND CHEMICAL PROPERTIES		
Information on basic physical and chemical properties		
9.1	Appearance	Solid abrasive discs backed on fiberglass (different colors)
	PH	Not applicable
	Odour	Odourless
	Odour threshold	Not applicable
	Density at 20°C	No available data for the abrasive product
	Relative vapour density (dry air = 1)	No available data for the abrasive product
	Flash point	Not applicable
	Melting temperature	Not applicable for the abrasive product
	Boiling temperature	Not applicable for the abrasive product
	Self-ignition temperature	Abrasive material is not combustible. Binder material has a self-ignition temperature > 300°C
	Decomposition temperature	> 250°C, with reference to the components of the support material
	Explosive range	No available and applicable data for the components of § 3
	Comburent properties	Not applicable
	Vapour pressure at 20°C	Not significant for the abrasive product
	Water solubility	Insoluble
	Solvent solubility	Insoluble
	Partition coefficient n-octanol/water (log Pow)	No available and applicable data for the components of § 3
Other informations		
9.2	VOC (Directive 2010/75/EC)	Not present, < 0,1%
	VOC (volatile carbon)	Not present, < 0,1%
10 STABILITY AND REACTIVITY		
10.1	Chemical stability	The abrasive product is stable under recommended conditions of use and storage
10.2	Possibility of dangerous reactions	In contact with strong acids, strong alkaline agents, and strong oxidants may give rise to reactions
10.3	Conditions to avoid	Avoid strong and prolonged overheating, in uncontrolled conditions and with triggers
10.4	Incompatible materials	Strong acids, strong bases, and concentrated oxidants or concentrate reducing agents, which may alter product characteristics, particularly adhesive, and create safety hazards when mills are used on machines
10.5	Hazardous decomposition products	Dangerous vapors/gases such as carbon monoxide, carbon dioxide and nitrogen oxides can be produced for overheating and decomposition at temperatures above 250°C

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11	TOXICOLOGICAL INFORMATIONS		
11.1	Toxicological effects		
	Acute toxicity	The material is matrix inerted. Data refer to the abrasive substances present For this abrasive product (estimated figure based on component weight calculation) LD50 (oral) > 5000 mg / Kg	
		Silicon carbide	No available data
	Effects on eye	Based on available data, the classification criteria are not met Mechanical eye irritation: Symptoms may include irritation, redness, corneal abrasions, and tearing. The dust that forms during use can cause eye irritation	
	Effects on skin	Based on available data, the classification criteria are not met Mechanical skin irritation: Symptoms may include itching and erythema	
	Sensitisation	Based on available data, the classification criteria are not met	
	Inhalation	Based on available data, the classification criteria are not met. Irritation (upper respiratory tract): Symptoms may include pain in the nose and throat, cough, sneezing. The dust that forms during use can cause irritation of the respiratory system	
	Ingestion	Based on available data, the classification criteria are not met. Ingestion is not a probable route of exposure to this product	
	Specific target organ toxicity (STOT) - single and repeated exposure	Based on available data, the classification criteria are not met	
	Aspiration hazard	Based on available data, the classification criteria are not met	
	Other adverse effects	Health risks may depend on exposure to materials subjected to abrasion processes	
11.2	CMR properties		
	Carcinogenicity	Studies on workers with chronic exposure to the components of the abrasive product did not show carcinogenic effects for any of the components	
	Mutagenicity	In vitro and in vivo studies carried out on the components indicate that none of the substances present in the product are genotoxic	
	Reproductive toxicity	Based on available data, the classification criteria are not met	
11.3	Other information: metabolism, kinetics, mechanism of action, effects on the endocrine system for short and long term effects		
	No other informations are available		
12	ECOLOGICAL INFORMATIONS		
12.1	Ecotoxicity	Acute and chronic toxicity: based on available data the classification criteria are not met. Components of the product are not classified hazardous to aquatic environment. ACUTE ECOTOXICITY CSi (Silicon carbide): no available data CHRONIC ECOTOXICITY No data on chronic ecotoxicity are available for the ingredients of the product	
12.2	Elimination information (persistence and degradability)	No information is available for this product. Abrasive components present are inorganic, not biodegradable in water and soil	
12.4	Mobility in soil	No information is available for the product. The substances present in the product, mentioned in § 3, do not present significant mobility in the soil	
12.5	PVB, vPvB substances	None of the substances present in the product is subject to the criteria for PVB or vPvB substances (Annex VIII of the REACH Regulation)	
12.6	Properties of endocrine system disrupting	The product does not contain substances with endocrine system disrupting properties	
12.7	Other informations	No other adverse effects are known	

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13 DISPOSAL CONSIDERATIONS		
The information in this section contains instructions and general notes. The list of identified uses in section 1 for specific information available		
13.1	Waste treatment methods	Product The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by- products should at all times comply with the law on environmental protection and waste disposal legislation and the requirements of any relevant local authorities. Dispose of surplus and non-recyclable products via a licensed waste disposal. The untreated waste should not be disposed of in the sewer system unless they are not fully compliant with the requirements of each institution and legislation Packaging The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Dispose of this material and its container must be with proper precautions. Empty containers or liners may retain some product residues. Prevent drift and runoff of spilled material and contact with soil, waterways, drains and sewers
14 TRANSPORT INFORMATION		
14.1	UN number	Not applicable
14.2	Proper shipping name	Land transport, road and rail (ADR/RID): not applicable Transport by sea (IMDG): not applicable Air transport (ICAO-TI / IATA-DGR): not applicable
14.3	Transport hazard classes	Land transport (ADR/RID): Not regulated Trasport by sea (IMDG): Not regulated Air transport (ICAO-TI / IATA-DGR): Not regulated
14.4	Packing group	Not applicable
15.5	Environmental hazards	Land transport (ADR/RID): No Trasport by sea (IMDG): No Air transport (ICAO-TI / IATA-DGR): No
14.6	Special precautions for users	Transport within the user's properties: always transport with closed containers, stored vertically and secured to the means of transport. Check the suitability of the people carrying out the transport to intervene effectively in the event of an accident and/or spill
14.7	Transport in bulk according to Annex II of MARPOL 73/8 and the IBC Code	Not applicable
15 REGULATORY INFORMATION		
15.1	Main regulatory references	• GHS Version 07 • OSHA Hazard Communication Standard (29 CFR 1910.1200) • TSCA Inventory • CALIFORNIA PROPOSITION 65. Chemicals known to the State to cause cancer or reproductive toxicity (December 29, 2023): Applicable for the presence of process impurity Dimethylformamide (< 50 ppm) • SARA Section 311/312 Hazard Categories: Not Applicable (manufactured articles) • SARA Section 313. No ingredients listed. This product does not contain nor is it manufactured with ozone depleting substances. • Canada WHMIS (Canada): NO HAZARD CLASS is applicable

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16 OTHER INFORMATIONS																																							
16.1	HMIS Rating. Health: 0 - Flammability: 0 - Reactivity: 0 NFPA Rating Health: 0 - Flammability: 0 - Instability: 0																																						
16.2	Full text of H statements, sections 2 and 3 ---																																						
16.3	Key references and data sources • Global Harmonized System of Classification and Labelling of Chemicals (GHS), 7th revised edition (GHS 7) • OSHA Hazard Communication Standard (29 CFR 1910.1200) • Canadian WHMIS 2015 regulations • State of California Environmental protection agency office of environmental health hazard assessment safe drinking water and toxic enforcement act of 1986. List of Chemicals known to the state to cause cancer or reproductive toxicity, December 29, 2023. • SDS of raw materials suppliers																																						
16.4	Acronyms <table border="1"> <tr><td>ACGIH</td><td>American conference of governmental industrial hygienists</td></tr> <tr><td>ANSI</td><td>American National Standards Institute</td></tr> <tr><td>ADR</td><td>Agreement on the international carriage of dangerous goods by road</td></tr> <tr><td>CAS</td><td>Chemical abstracts service</td></tr> <tr><td>GHS</td><td>Global Harmonized System</td></tr> <tr><td>DNEL</td><td>Derived no effect level</td></tr> <tr><td>IATAL</td><td>international air transport association</td></tr> <tr><td>IMDG Code</td><td>International Maritime Dangerous Goods Code</td></tr> <tr><td>LC</td><td>lethal concentration</td></tr> <tr><td>LDL</td><td>lethal dose</td></tr> <tr><td>NFPA</td><td>National Fire Protection Association</td></tr> <tr><td>OSHA</td><td>Occupational Safety and Health Administration (U.S.A.)</td></tr> <tr><td>PBT</td><td>persistent, bioaccumulative and toxic</td></tr> <tr><td>PNEC</td><td>predicted no effect concentration</td></tr> <tr><td>RID</td><td>Regulations on the international carriage of dangerous goods by rail</td></tr> <tr><td>TLV</td><td>threshold limit value</td></tr> <tr><td>TWA</td><td>time weighted average</td></tr> <tr><td>vPvB</td><td>Very persistent and very bioaccumulative</td></tr> <tr><td>WHMIS</td><td>Workplace Hazardous Materials Information System (Canada)</td></tr> </table>	ACGIH	American conference of governmental industrial hygienists	ANSI	American National Standards Institute	ADR	Agreement on the international carriage of dangerous goods by road	CAS	Chemical abstracts service	GHS	Global Harmonized System	DNEL	Derived no effect level	IATAL	international air transport association	IMDG Code	International Maritime Dangerous Goods Code	LC	lethal concentration	LDL	lethal dose	NFPA	National Fire Protection Association	OSHA	Occupational Safety and Health Administration (U.S.A.)	PBT	persistent, bioaccumulative and toxic	PNEC	predicted no effect concentration	RID	Regulations on the international carriage of dangerous goods by rail	TLV	threshold limit value	TWA	time weighted average	vPvB	Very persistent and very bioaccumulative	WHMIS	Workplace Hazardous Materials Information System (Canada)
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16.5	Changes to previous version First issue																																						
16.6	Notes The information provided in this safety data sheet is correct to the best of our knowledge at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation and disposal and is not to be considered a warranty or quality specification. The user must verify the suitability and completeness of the information in relation to its particular use of the product																																						