

# MATERIAL SAFETY INFORMATION SHEET

**Voluntary material safety information sheet**  
**according to GHS – GLOBAL HARMONISED SYSTEM, Reg. EC 1907/2006 and to Reg. EU 830/2015**

<b>1</b>	<b>CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>	
1.1	Product name	VETRIFIED ABRASIVE WHEELS
1.2	Description and use of the product	Rigid abrasive material, for industrial and professional use. Do not use for other purposes
1.3	Company name	ROSVER S.r.l.
	Address	Via Concordia, 5/C5 - 20099 Sesto San Giovanni (MI)
	Telephone number	+39 0224417219
	Fax number	+39 022403942
	E-mail address of the competent person responsible for Safety Data Sheet	info@rosver.com
1.4	Emergency phone number	Poison control centers in Italy <ul style="list-style-type: none"> <li>• ROMA CAVp "Osp. Pediatrico Bambino Gesù". Tel: 0039 06 68593726</li> <li>• FOGGIA Az. Osp. Univ. Foggia. Tel: 0039 0881 732326</li> <li>• MILANO Ospedale Niguarda Ca' Granda. Tel: 0039 02 66101029</li> <li>• NAPOLI Ospedale Riuniti Cardarelli. Tel: 0039 081 7472870</li> <li>• ROMA Policlinico Agostino Gemelli. Tel: 0039 06 3054343</li> <li>• ROMA Policlinico Umberto I. Tel: 0039 06 490663</li> <li>• PAVIA CAV Centro Naz. di Informazione Tossicologica. Tel: 0039 0382 24444</li> <li>• BERGAMO Azienda Ospedaliera Papa Giovanni XXII. Tel.: 0039 800 883300</li> <li>• FIRENZE Az. Osp. "Careggi" U.O. Tossicologia Medica. Tel.: 0039 055 7947819</li> </ul>
<b>2</b>	<b>HAZARDS IDENTIFICATION</b>	
2.1	<b>GHS Symbols and hazard labelling according to Reg. 1272/2008/EC</b>	
	PREAMBLE. SURFACE CONDITIONING IS AN ABRASIVE ARTICLE. IT IS NOT A CHEMICAL MIXTURE, ACCORDING TO DEFINITIONS OF OSHA STANDARDS FOR HAZARD LABELING 1910.1200 AND ACCORDING TO REG. 1272/2008/UE. "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 INFORMATIVE PRODUCT SAFETY DATA SHEET IS VOLUNTARY. WHEN APPLICABLE, IT FOLLOWS THE EUROPEAN UNION REGULATION 830/2015 CRITERIA, ALTHOUGH SAFETY DATA SHEETS SHOULD BE APPLICABLE TO CHEMICAL SUBSTANCES AND MIXTURES AND NOT TO ARTICLES	
	HAZARDS CLASSIFICATION ACCORDING TO OSHA AND TO GHS CRITERIA OF CHEMICALS ARE NOT DIRECTLY APPLICABLE TO THIS ABRASIVE ARTICLE	
	NO GHS PICTOGRAMS AND NO GHS HAZARD STATEMENTS ARE APPLICABLE TO THIS ABRASIVE ARTICLE	
	NO GHS PRECAUTIONARY STATEMENTS ARE APPLICABLE TO THIS ABRASIVE ARTICLE. HOWEVER, PRECAUTIONARY STATEMENTS AND OTHER TECHNICAL INFORMATION IN FOLLOWING SECTIONS ARE GIVEN CONCERNING THE METHOD OF USE (MATERIAL ABRASION PROCESSES)	
	<b>NOT HAZARDOUS</b>	
	<b>not directly applicable to abrasive articles</b>	
	<b>NO GHS PICTOGRAM</b>	
	<b>not directly applicable to abrasive articles</b>	
2.2	<b>Hazard statements</b>	
	<b>not directly applicable to abrasive articles</b>	
	No hazard statements	

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2.3	<b>Precautionary statements not directly applicable to abrasive articles</b>	
	P 260	Do not breathe dust
	P 280	Wear protective gloves/eye/face protection
2.4	<b>Other hazards</b>	
	The mixture meets criteria for PBT according to Reg. (EC) 1907/2006, all. XIII	Not applicable
	The mixture meets the criteria for vPvB according to Reg.(EC) 1907/2006, all. XIII	Not applicable
	Other hazards	Risks about its use should be assessed by the safety management system of any downstream user, concerning specific material abrasion processes
2.5	<b>Label elements</b>	
	<b>NOT HAZARDOUS, NO GHS PICTOGRAM not directly applicable to abrasive articles</b>	
	Substances to be indicated on the label	Not applicable

<b>3</b>	<b>COMPOSITION / INFORMATION ON INGREDIENTS</b>
3.1	Substances: not applicable
3.2	Mixtures: not applicable Abrasive article based on abrasive powders supported on an inert matrix pigmented with adjuvants and functional and technological additives


## Abrasive material (supported and binded)

Matrix	Component substance	GHS pictogram	Hazard classification** H statements	CAS N.	EC N.
Abrasive powders	<b>Corundum/Aluminium oxide* (Al<sub>2</sub>O<sub>3</sub>)</b> REACH Reg. N: 01-2119529248-35-xxxx	No GHS pictogram	Not hazardous	1344-28-1	215-691-6

\*: The word Corundum is defined as a natural form of alumina containing small amounts of iron, magnesium and silica impurities

\*\* : Differences in the % composition of the abrasive powdery mixture do not involve any modifications to the classification of material hazards according to the current Regulations (see also § 8). The amount of abrasives can be different according to the specific commercial article code. Small amounts of not hazardous components and/or impurities can be present in the solid matrix

## Chemical adjuvants and functional additives

Component substance	GHS pictogram	Hazard classification** H statements	CAS N.	EC N.
<b>Natural kaolin (Feldspar)</b> REACH Reg. N: not applicable Presence of free crystalline silica < 1%	No GHS pictogram	Not hazardous	1332-58-7	310-194-1
<b>Disodium tetraborate decahydrate (SVHC candidate list)</b> Index N: 005-011-00-4 N. Reg. REACH: 01-2119490790-32-0011		Repr. 1B_H360HD	1303-96-4	215-540-4

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.

The upper limits of the ranges of concentration are excluded

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

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### 4 FIRST AID MEASURES

Premise

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	Threat symptomatically. If ingested or inhaled (large amounts), immediately contact a poison control center. No specific treatments are known

### 5 FIRE FIGHTING MEASURES

5.1	Suitable extinguishing agents	This abrasive material is not flammable. Abrasives substances are not combustible. In the event of a fire, the following extinguishing media may be used: carbon dioxide (CO <sub>2</sub> ), 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	Cool with water jets containers to avoid product decomposition and the development of substances potentially hazardous to health. Always wear complete fire protection equipment. Collect extinguishing water that should not be discharged into drains. Dispose of contaminated water used for fire extinguishing and residues according to applicable regulations. Use normal fire fighting clothing such as an open-air compressor (EN 137), full flame retardant (EN469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30)

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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	<p>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.</p> <p>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.</p> <p>Do not smoke, drink or eat during use. Provide near waterpoints.</p> <div></div>	
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 material for industrial and professional use	

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8	EXPOSURE CONTROLS / PERSONAL PROTECTION		
8.1	Control parameters		
	Exposure limit values	Substance	Limite di esposizione
		Ossido di alluminio (Corundum) [as Al <sub>2</sub> O <sub>3</sub> ]	PEL (USA) - Long term limit (8 h): 15 mg/m <sup>3</sup> as Al, total dust; 15 mg/m <sup>3</sup> as Al, respirable fraction REL (USA) - Long term limit (8 h): 10 mg/m <sup>3</sup> as Al, total dust; 5 mg/m <sup>3</sup> as Al, respirable fraction TLV (USA) - Long term limit (8 h): 1 mg/m <sup>3</sup> as Al, respirab.fraction OEL (Canada) - Long term limit (8 h): 1,0 mg/m <sup>3</sup> as Al, respirable fraction EV (Canada) - Long term limit (8 h): 10 mg/m <sup>3</sup> as Al, total dust
		Kaolin	TLV ACGIH - Long term limit (8 h): 2 mg/m <sup>3</sup> respirable fraction
		Crystalline Silica (impurity of Quartz)	TLV ACGIH - Long term limit (8 h): 0,025 mg/m <sup>3</sup> respirable fraction
		Disodium tetraborate decahydrate	LD50 (oral, rat) > 2000 mg/kg LD50 (skin contact): no available data LC50 (inhalation): no available data
		Dust/Particles not otherwise classified	10 mg/m <sup>3</sup> inhalable fraction (TWA 8 h, ACGIH 2019) 3 mg/m <sup>3</sup> respirable fraction (TWA 8 h, ACGIH 2019)
	Exposure control (depending also on the specific abrasion process method and related materials)		
8.2	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.	
	Respiratory protection	During use, as a result of the formation of dusts and aerosols, protect the respiratory tract by means of collective suction systems or individual devices (P3 filter mask), according to NIOSH, CEN (US) or EN 14387 standards. If the respirator is the only means of protection, use a fully flush ventilated system	
	Eyes protection	During use, as a result of dust and aerosol formation, protect eyes with tested and approved devices according to the requirements of appropriate technical standards such as NIOSH (USA) or EN 166 (EU)	
	Hands protection	Leather, rubber or PVC working gloves (EN 374)	
	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		
9.1	<b>Information on basic physical and chemical properties</b>	
	Appearance	Rigid solid abrasive material (pigmented, 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 for the abrasive product
	Melting temperature	Not applicable for the abrasive product
	Boiling temperature	Not applicable for the abrasive product
	Self-ignition temperature	Not applicable for the abrasive product
	Decomposition temperature	No available data for the abrasive product
	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
	<b>Other informations</b>	
9.2	VOC (Directive 2010/75/EC)	< 0,1%
	VOC (volatile carbon)	< 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	No dangerous reactions are known
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
10.5	Hazardous decomposition products	No dangerous decomposition reactions known in normal use

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11	TOXICOLOGICAL INFORMATIONS			
11.1	Toxicological effects			
	Acute toxicity	ABRASIVE COMPONENTS		
		Aluminium oxide (Corundum) [come Al <sub>2</sub> O <sub>3</sub> ]	LD50 (ingestion, rat) > 2000 mg/kg LD50 (skin contact): no relevant effects LC50 (inhalation, rat) > 2,3 mg/l DNEL (ingestion) = 6,2 mg/kg/day DNEL (inhalation) = 15,6 mg/m <sup>3</sup> , respirable fraction	
		BINDERS, ADJUVANTS AND ADDITIVES		
		Kaolin/Feldspar	No significant effect. Only large quantities can have adverse effects on human health	
		Sodium tetraborate decahydrate	LD50 (ingestion, rat) > 2000 mg/kg LD50 (skin contact): no available data LC50 (inhalation, rat): no available data	
	Effects on eyes	Based on available data, the classification criteria are not met. Mechanical eye irritation: symptoms may include irritation, redness, abrasions of the cornea and watery eyes. The powders that are formed during use can cause eye irritation		
	Effects on skin	Based on available data, the classification criteria are not met. Mechanical skin irritation: symptoms can 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, coughing, sneezing. The dust that is formed 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 hazards may depend on exposure to abrasive materials		
	11.2	CMR properties		
		Carcinogenicity	Based on available data, the classification criteria are not met	
		Mutagenicity	Based on available data, the classification criteria are not met	
Reproductive toxicity		Sodium tetraborate decahydrate is classified as dangerous for reproduction. It may damage fertility or the unborn child		
11.3	Immediate, delayed and chronic effects arising from short and long term exposures			
	No other informations are available			



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12 ECOLOGICAL INFORMATION		
12.1	Ecotoxicity	<p>Acute and chronic toxicity: Based on available data, classification criteria are not met. Product components are not classified as environmentally hazardous.</p> <p>ACUTE TOXICITY ALUMINUM OXIDE (CORUNDUM) [as Al<sub>2</sub>O<sub>3</sub>]: LC50, fish (salmo trutta) &gt; 100 mg/l – 96 h LC50, aquatic invertebrates (daphnia magna) &gt; 100 mg/l – 48 h EC50, algae (selenastrum capricornutum) &gt; 100 mg/l – 72 h KAOLIN (FELDSPAR): no available data, not relevant about this substance SODIO TETRABORATO DECAIDRATO: no available data, not relevant about this substance</p> <p>CHRONIC TOXICITY Chronic ecotoxicity data are not available for the ingredients of this abrasive product</p>
12.2	Elimination information (persistence and degradability)	<p>No information is available for this product. The abrasive components present are inorganic and are not biodegradable in water and soil</p>
12.3	Potential of bioaccumulation	<p>Product is not classified PVB or vPvB. None of the substances present in this product is subject to the criteria for PVB or vPvB substances (Annex VIII of REACH Regulation)</p>
12.4	Mobility in soil	<p>No information is available for the product. The substances present in the product, mentioned in § 3, do not present significant mobility in the soil.</p>
12.5	PVB, vPvB substances	<p>None of the substances present in the product is subject to the criteria for PVB or vPvB substances (Annex VIII of Reg. REACH)</p>
12.6	Other adverse effects	<p>No other adverse effects are known</p>
13 DISPOSAL CONSIDERATIONS		
<p>The information in this section contains instructions and general notes. The list of identified uses in section 1 for specific information available</p>		
13.1	Waste treatment methods	<p>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. Hazardous waste: YES (depending on the specific process and related materials)</p> <p>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</p>
13.2	European waste catalogue (EWC)	<p>For disposal within the EU is roughly from the code used by the sudden refusal to register the European Waste Catalogue (EWC)</p>



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<b>14</b>	<b>TRANSPORT INFORMATION</b>	
14.1	Land transport ADR – RID (road and rail)	Not regulated, not applicable
14.2	Transport by sea IMDG	Not regulated, not applicable
14.3	Air transport IATA	Not regulated, not applicable
14.4	Special precautions for users	Transport within user's premises: always transport in closed containers that are upright and secure means of transport. Ensure that persons involved in the service to take effective action in case of accident and / or spillage.
14.5	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information applicable or available
<b>15</b>	<b>REGULATORY INFORMATION</b>	
15.1	Reg. 1272/2008/EC	The product does not contain substances which can be classified as carcinogenic cat. 1 or 2 under Reg. 1272/2008/EC and later updates.
15.2	Reg. 1907/2006/EC (REACH)	The product conforms to the requirements provided for in Title II of Reg. 1907/2006/EC (registration of substances) SVHC substances included in the candidate list of ECHA: this product contains > 0,1% Disodium tetraborate decahydrate (EC n. 215-540-4) Annex XVII - Regulation 1907/2006/EC (restricted substances): none
15.3	Chemical safety assessment	For this product / article, chemical safety assessment has not been performed and is not applicable. All components present are used in accordance with the identified uses and the relevant and applicable scenarios (see also section 8.2)
<b>16</b>	<b>OTHER INFORMATIONS</b>	
16.1	Full text of H statements, sections 2 and 3 (Reg. 1272/2008/EC)	H360FD_ May damage fertility or the unborn child
16.2	Bibliographic references	ECDIN - Environmental Chemical Data and Information Network
		IUCLID - International Uniform Chemical Information Data Base
		ECHA C&L inventory
		NIOSH - Registry of Toxic Effects of Chemical Substances
		IFA_GESTIS - <a href="http://limitvalue.ifa.dguv.de/">http://limitvalue.ifa.dguv.de/</a>
16.2	Changes to previous version	TOXNET - <a href="https://toxnet.nlm.nih.gov/">https://toxnet.nlm.nih.gov/</a> First issue
16.3	Further informations	When applicable, the information herein is correct at OSHA standard, Reg 1272/2008/EC and following amendments. Product conforms to the requirements provided in Title II of Regulation 1907/2006/EC (the registration of substances). None of the substances in this product is subject to authorization (annex 14)
16.4	Disclaimer	This voluntary material MSDS was issued following applicable requirements of Reg 830/2015/EU. It does not excuse in any way the user from knowing and applying all texts governing his activity. The user will take under its responsibility the precautions related to the use of the product. The set of regulations mentioned is intended simply to help the recipient to fulfill her obligations. This list should not be considered as a technical note details. The information is based on our knowledge of the product, the date indicated. They are given in good faith. The attention of the user is directed to possible risks incurred when a product is used for other purposes than for which it was conceived. The recipient must ensure that no other obligations to compete on the basis of texts in addition to those mentioned