

metabo®	Material Safety Data Sheet		ML 1040 p. 1/3 24. January 2012
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Important notice: The bonded abrasives are inert products which do not create any risk when handled or stored. When used on grinding Machines they require specific measures to protect the operators. In most cases, the airborne material removed from the work piece will be significantly greater than grinding wheel components.			
1. Product identification			
Product identity/trade name: Metabo grinding wheel Type 1, vitrified bond			
2. Hazards identification			
Not applicable: Bonded abrasives are not dangerous products as defined in EC Directive N° 99/45 Dust may be slightly irritating to eyes and respiratory tract at high concentrations. Grinding may create elevated sounds levels which may affect hearing.			
3. Composition/information on ingredients			
	Component	CAS. number	Range Wt. %
2.1. Abrasive grain:	Aluminium-oxide	1344-28-1	70-95%
	or Silicon-carbide	409-21-2	70-95%
2.2. Bond:	Ceramic bond	n/a	5-30%
2.5 Other	Label	n/a	X
	Plastic hole bushing	9003-53-6	X
4. First aid measures			
Inhalation: move to fresh air. Eye contact: Wash large amounts of water. Obtain medical assistance if needed. Skin contact: wash affected area with soap and water.			
5. Fire fighting measures			
Extinguish media: Water, Carbon dioxide, Dry chemical, Foam			
6. Accidental release measures			
Follow normal clean up procedures. Must not use broken or damaged grinding tool.			
7. Handling and storage			
The safety requirements of bonded abrasive products are determined by EN 12413 Standard. In addition to this the products are conform to the further, stricter requirements of OSA (Organization for the Safety of Abrasives). We certificate this conformity by using oSa logo on our products. It is essential that both the manufacturer and user of the grinding tools strictly follow the safety instructions existing in the laws, decrees and technical standards of their country and in machine instructions. - Grinding wheels are fragile, thus always transport, store and handle them with the utmost care. (EN 12413) - They should always be stored frost free, at moderate temperature and humidity in package, on shelves or racks.			

- Always inspect carefully the products before mounting for possible damage, cracks!
- Vitrified wheels exceeding 80 mm in diameter can be subjected to a sound (ring) test.
- Carefully read the label or the indications on the wheel (sizes, specification, RPM) and make sure that the wheel is suitable for the application and machine!
- If something is not clear about the safety requirements of the tool, don't hesitate to consult the manufacturer!

Mounting of abrasives

- Carefully inspect the wheel guard and mounting devices: they must be conform to the relevant rules, must be in good mechanical condition and free of foreign bodies!
- The clamping flanges and mounting devices must be conform to the machine manual, EN 13218, ISO 666 and „FEPA Safety Code“!
- The blotters should be conform to EN 12413!
- Mounting, balancing and dressing of abrasives shall be performed only on the basis of the machine manual by a qualified trained person!
- After mounting start the machine and run it idle for at least 30 seconds, with all personnel away!

8. Exposure controls and personal protection

- Operating speed and RPM of wheel never exceeds the max. operating speed or RPM printed on the wheel label or on the grinding wheel!
- Always use personal protection! (respirators, safety glasses, hearing protection, gloves)
- Ventilation is recommended.

9. Physical and chemical properties:

State: solid article
 Colour:
 Grain type: aluminium oxide: brown-grey, aluminium oxide: pink or white, silicon carbide: black or green
 Odour: odourless
 pH: n/a
 Density: 1,5-3,5 g/cm³
 Solubility in water: n/a

10. Stability and reactivity

Stability: stable
 Avoid: strong acids, bases and oxidizers.
 Hazardous decomposition products: during grinding dust occurs.

11. Toxicological information

Permanent inhalation of the dust may decrease capacity of lung.
 Carcinogen or probable carcinogen effect: not identified.

12. Ecological information

Degradation: n/a
 Ecological toxicity: not known

13. Disposal considerations

Standard disposal methods. Please check contaminations from other sources: cooling agent, material of workpiece.

14. Transport information

This is not dangerous product.

15. Regulatory information

EN 12413
 This Material Safety Data Sheet is based on 88/379 EC és 2001/58/EC and conform to a 44/2000 (XII.27) EüM regulation.

16. Other information

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued.
 The company makes no warranties with respect to the accuracy of the information or suitability of the recommendation, and assumes no liability to any user thereof.