



GARDNER SCREW CORPORATION

Screw Machine Products • Furniture Hardware • Metal Fasteners & Stamping • Industrial Supplies

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How to read a Coated Abrasive Specification

A coated abrasive product is made up of three basic raw materials: (1) an abrasive mineral, (2) the backing onto which the abrasive is applied, and (3) an adhesive bond.

The Carborundum Abrasives coated abrasive marking system includes both a generic and a technical marking.

The generic markings identify the abrasive type, bond, backing, and any special features and/or tradenames. An example would be "Premier Red Aluminum Oxide Dri-Lube Resin Paper Open."

The technical markings identify the actual components which make up the product. Technical markings consist of up to 10 parts. An example would be "P400 B 0912 DO." The following terminology explains the technical marking system.

Coated Abrasive Terminology Key									
P	60	Y	C		09	8	6	A	O
GRADING	GRIT SIZE	BACKING WEIGHT	CLOTH TYPE	BACKING FLEXIBILITY	MINERAL (ABRASIVE)	BACKING	BOND	PERFORMANCE	COATING
P FEPA _ ANSI/CAMI	12 ↑ ↓ 2000	PAPER: A B C D E F	B POLY/ COTTON BLEND C COTTON P POLYESTER	F FLEXIBLE _ STANDARD S STIFF	01 CROCUS 02 EMERY 03 GARNET 04 S/C 07 LBA 08 A/O 09 HT A/O HEAT TREATED 11 ZA 12 ZA PREMIUM 25 SG	0 MESH 1 PAPER 4 FIBRE CLOTH: 5 MOST FLEXIBLE ↑ ↓ 8 LEAST FLEXIBLE	0 GLUE 1 U/G 2 U/U FULL RESIN: 4 LEAST DURABLE ↑ ↓ 7 MOST DURABLE	A ANTI-STATIC D DRI-LUBE OVERSIZE R REACTIVE OVERSIZE W WASHABLE OR WATERPROOF	O OPEN COAT _ CLOSED COAT
	CRS MED FIN MICRON	CLOTH: J X Y M MESH V FIBRE							

Abrasive Types

01 Crocus

Iron oxide (crocus) is a very soft, natural abrasive which is red in color.

- for fine polishing soft metals such as gold



02 Emery

Emery is a dark gray, round-shaped grain which tends to polish rather than abrade a work surface.

- for polishing and cleaning metal only



03 Garnet

Garnet is reddish brown in color. This natural abrasive is medium hard and relatively sharp, but not as durable as synthetic abrasives.

- for use on wood only
- particularly good for soft woods such as pine
- produces an excellent finish



04 S/C Silicone Carbide

Silicon carbide is the hardest and sharpest of the manufactured abrasives. Because of its extreme sharpness, this bluish-black abrasive grain permits fast stock removal and cool cut.

- cast iron
- non-ferrous metals, i.e. brass, aluminum and bronze
- non-metallics, i.e. glass, rubber, plastic and stone
- final finish on wood and stainless steel
- abrasive planing particleboard



07 LBA Light Brown Aluminum Oxide

Light brown aluminum oxide is a tough, yet sharp, synthetic abrasive characterized by cool cut, long life, and the ability to break down under pressure producing new cutting edges.

- production wood sanding
- non-ferrous metal finishing



08 A/O Brown Aluminum Oxide

Brown aluminum oxide is a tough, durable, synthetic abrasive characterized by the long life and wear resistance if its cutting edges. It offers enormous penetrating strength, even at high speeds.

- ferrous metals
- aluminum
- hardwood



11 ZA, 12 ZA Zirconia Alumina

Zirconia alumina is an ultra-tough, synthetic abrasive which provides a free, cool cut for high stock removal applications. It is tougher and sharper than aluminum oxide.

It has a micro-crystalline structure which allows for controlled breakdown and self-sharpening.

- heavy duty snagging and grinding all ferrous and non-ferrous metals
- abrasive planing of wood, plywood, particleboard
- grinding fibreglass, rubber and plastics



25 SG Ceramic Alumina

The sub-micron structure of ceramic alumina allows each grain to continually expose sharp cutting points, resulting in a cooler cutting action and an extended life.

- all ferrous and non-ferrous metals, carbon steel, and exotic alloys

