



MATERIAL SAFETY DATA SHEET

PRODUCT NUMBER: 10 99 32 / 10 99 42

SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE

1.1 Product identifier

PRODUCT: Abrasive Cut-off Wheels Type FEM (2HA)
Chemical Name and synonyms: Resinoid Abrasive Products.
Signified by the letter 'B' in the product mark.
A typical mark is 12A 148 R9**B** ACAA

1.2 TRADE NAMES AND SYNONYMS

Brand – Flexovit, Norton and Baystate
Resinoid Grinding Wheels, Cutting-Off and Reinforced
Cutting-off Wheels, Depressed Centre Wheels, Unituf,
Unilastic and Unilec Wheels, Cups, Saucers, Dishes, Rings,
Cones, Plugs, Cylinders, Discs, Segments, Sticks, Blocks
Hones, Mounted Points and Mounted Wheels.

1.3 Details of the supplier of the safety data sheet

SUPPLIER: METPREP LTD.
CURRIERS CLOSE
CHARTER AVENUE
COVENTRY CV4 8AW
CONTACT: sales@metprep.co.uk

1.4 Emergency telephone number

TELEPHONE: 024 7642 1222

SECTION 2 SUBSTANCE HAZARD IDENTIFICATION

Resinoid grinding wheels are not considered a hazardous product under CHIP regulations. In normal use users are advised to maintain particulate exposure below the Occupational Exposure Limit for nuisance dusts as defined in the latest EH40 publication.

Some hazards associated with the use of impregnated wheels are:-
Wax impregnation; heat build up may produce low level wax fumes.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Products may contain one or a combination of the following:

CHEMICAL NAME Silicon Carbide
Aluminium Oxide
Zirconium Aluminium Oxide
Cured resins; Phenolic and others.

CONSTITUENT	CAS. No.	RANGE BY % MASS	EH40 DESIGNATION mg m ⁻³ 8hr TWA Total Inhalable Respirable		EH40 STANDARD
Cured Resin	N/A	1-35	10	4	OES
Silicon Carbide	409-21-2	30 -50	10	4	OES
Aluminium Oxide	1344-28-1	10-95	10	4	OES
Zirconium Oxide	1314-23-4	4-40	-	5	OES
Iron Pyrites	1309-36-0	1-35	-	5	OES
Copper Powder	7440-50-8	30-90	-	1*	OES



*The use of copper wheels involves immersion in liquid, so will not liberate particulate into the atmosphere.

Some products may contain glass fibre reinforcement.

IMPREGNATES

Some resinoid products may contain wax as an impregnate within the structure.

Wax (Paraffin)	8002-74-2	1-20	2(as fume)	-	OES
----------------	-----------	------	------------	---	-----

BUSHING MATERIAL

As well as plain bore grinding wheels, bushed products are available and may contain one or more of the following materials.

Polystyrene Plastic	713-020-005	0-5	-	-	-
Mastic bore lining consisting of: Calcium Carbonate	1317-65-3		10	4	OES
Talc (Magnesium Silicate)	14807-96-6		10	4	OES
Adhesive	67-64-1		10	4	OES
Lithopone	1309-37-1		10	4	OES
Graphite	7440-44-0		10	5	OES
Glass Fibres	14808-60-7 1344-28-1 13463-67-7 1309-48-4 1303-86-2 1313-50-3 1305-78-8 12136-47-7	53 – 60 11 – 15.5 0 – 3 10 – 12.5 0 – 9 <1 10 – 12.5 <1	10	4	OES

These materials are not in the grinding zone and consequently do not present a hazard in normal use.

SECTION 4 FIRST AID MEASURES

Nuisance dust will be generated when dry grinding therefore LEV control should be applied if levels need controlling below the OES for nuisance dusts.

INHALATION	If a major exposure occurs, exposed personnel should be removed to fresh air until the level of air borne particulate subsides. Medical attention should be sought if breathing difficulties are experienced.
SKIN CONTACT	Wash exposed skin with water. Mechanical abrasion may occur on exposed skin increasing the potential of bacteria or other substance attack, e.g. from coolant oils. If irritation occurs seek medical attention.
EYE CONTACT	Due to the abrasive nature of particulate, irritation may occur. Eyes should be flushed copiously and medical attention sought if symptoms persist.

SECTION 5 FIRE FIGHTING MEASURES

Abrasive grain is none combustible. Cured Organic Bonded grinding wheels will burn in a fire generating toxic fumes. Impregnated wheels may evolve normal combustion products and or Sulphur dioxide.



SECTION 6 ACCIDENTAL RELEASE MEASURES	
PERSONAL PROTECTION	If conditions are dusty a dust mask should be worn. If there is a potential for eye contact eye protection is recommended.
ENVIRONMENTAL PRECAUTIONS	Waste particulate must be bagged and sealed then disposed of as general waste.
METHODS FOR CLEARING UP	Once cured resinoid bonded products are inert. Spillage's should be cleaned up by wet sweeping or vacuum.

SECTION 7 HANDLING AND STORAGE	
HANDLING PRECAUTIONS	Use of the grinding wheels must be in compliance with the 'Safety in the Use of Abrasive Wheels' HS(G) 17 available from HSE books. Also refer to F.E.P.A Safety Code for the Use, Care and Protection of Abrasive Wheels. The user should ensure correct product selection according to operating conditions.
STORAGE INCLUDING ANY SPECIAL REQUIREMENTS	Resinoid wheels should be protected from acid oil and frost and excessive temperature variation in storage. Machine coolant (if used) will cause the wheel to be out of balance if allowed to gather in one half of the wheel. Coolant should be drained or spun off before storage. Reference to the above documents will identify the relevant storage requirements for a given product type. Providing the product is stored cool and dry, away from direct sunlight The shelf life of an Organic Bonded grinding wheel is 3 years.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION	
ENGINEERING CONTROLS /VENTILATION	LEV must be provided if the OES standard as stated in the latest edition of EH40 for nuisance particulate is exceeded.
RESPIRATORY PROTECTION	Dust masks may be worn for low level short term exposure only.
EYE PROTECTION	Impact resistant eye protection must be worn when using grinding wheels.
HAND/SKIN PROTECTION	If regular exposure to abrasive particulate occurs gloves and overalls are recommended.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES	
BOILING POINT °C	-
FLASH POINT °C	-
SOLUBILITY IN WATER	Not miscible
VAPOUR PRESSURE	N/A
IGNITION TEMPERATURE °C	-

SECTION 10 STABILITY AND REACTIVITY PROPERTIES	
STABILITY	Very stable
CONDITIONS TO AVOID	Sudden excessive pressure. Side loading on cutting off wheels. Jamming wheels into the work piece. Cutting off wheels should always be reinforced on portable machines. Modifications of the product. Consult your Saint-Gobain Abrasives technical representative for advice.
COMBUSTION PRODUCTS	Wheels may evolve toxic gases in a fire

**SECTION 11 TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY:- None known

SECTION 12 ECOLOGICAL INFORMATION

DEGRADABILITY	Will degrade in time. If any doubt occurs the product should be re-tested before use.
ACUTE FISH TOXICITY	None known
WATER HAZARD CLASSIFICATION	N/A

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	General waste
-------------------------	---------------

SECTION 14 TRANSPORT INFORMATION

Special transportation precautions do not apply. However care should be taken to avoid mechanical damage during transportation.

SECTION 15 REGULATORY INFORMATION**PRODUCT LABEL DETAILS - PER CHIP**

PRODUCT TRADE NAME	Resinoid (bonded) Abrasive Products
HAZARD SYMBOL	Not classified as hazardous
RISK PHRASE No's & WORDS	N/A
SAFETY PHRASE No's & WORDS	N/A

Specific regulations governing the use of abrasive products has been extensively revoked. For guidance as to the general requirements reference should be made to the requirements under the European (6 pack) regulations and any revisions.

SECTION 16 OTHER INFORMATION

TRAINING ADVISE	In accordance with the requirements of the provision and use of work equipment regulations 1992, users of grinding wheels must be trained in the appropriate wheel mounting course, be certified and deemed competent to use and mount grinding wheels.
RECOMMENDED USES & RESTRICTIONS	Use of the grinding wheels must be in compliance with the 'Safety in the Use of Abrasive Wheels HS(G) 17 available from HSE books. Also refer to F.E.P.A Safety Code for the Use, Care and Protection of Abrasive Wheels. The user should ensure correct product selection according to operating conditions.