



TRIMAT GBC BRAKE LINING TECHNICAL SPECIFICATION SHEET

Trimat GBC is a semi-flexible asbestos-free brake lining, manufactured from a solid woven fabric of both natural and man-made yarns, with a brass wire inclusion which helps to stabilise the friction value by conducting from the operating surface.

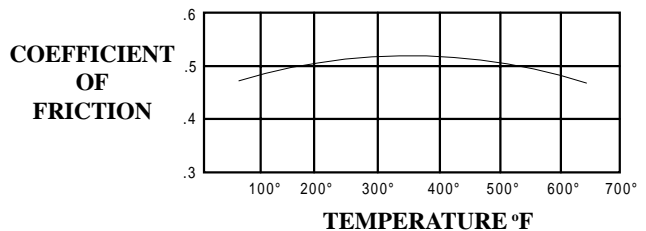
When the woven fabric is impregnated with the specially developed synthetic resin it produces a high friction material with excellent stability and high resistance to wear.

Both surfaces can be supplied ground, making it suitable for bonding and riveting to either internal or external contracting braking systems.

APPLICATIONS

This material can be supplied for use on oil immersed applications, although the friction value will be much lower than shown on the friction/temperature graph which is based on dry conditions.

A most efficient general purpose brake lining suitable for use on most applications, including winches, cranes, earth-moving and agricultural equipment, forging machinery and many others. Because of its versatility it is of course an ideal quality to stock.



NOTE: There is no standard test procedure for industrial Friction Materials, therefore it could be misleading to compare different manufacturers test results. The Co-efficient of Friction/Temperature Graph illustrated, should be used for comparison of the various Trimat qualities only.

TECHNICAL DETAILS (MEAN VALUES)

Ultimate Tensile Strength	4865 psi (340kg/cm ²)	Rivet Holding Capacity	14500 psi (1020kg/cm ²)
Ultimate Shear Strength	2195 psi (155kg/cm ²)	Specific Gravity	1.24
Ultimate Compressive Strength.....	19480 psi (1370kg/cm ²)		

RECOMMENDED OPERATING RANGE

Maximum Intermittent 450° F Maximum Continuous 300° F

RECOMMENDED MATING SURFACES

Close grained cast iron. Forged or cold rolled steel should be 180 Brinnell or over.

DRILLING DETAILS

High speed drills are quite acceptable at the following speeds:

Upto 1/2" diameter 850revs/min with feed rate 0.005"/rev.
Over 1/2" diameter the revs/min should be reduced accordingly.

for example:

At 5/8" diameter 600 revs/min the feed rate 0.005"/rev.

AVAILABILITY

Supplied in roll form, cut and shaped linings.

Nominal Roll Lengths	of 33ft
Thicknesses	from 3/16" up to 1 1/4"
Width	up to 20"



MATERIAL HEALTH, SAFETY & ENVIRONMENTAL DATA SHEET FOR TRIMAT GBC

1) IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Identification:	TRIMAT GBC
Company:	TRIMAT Ltd.,
Address:	Narrowboat Way Hurst Business Park Brierley Hill West Midlands. DY5 1UF ENGLAND
Telephone Number:	01384 473400
Fax Number:	01384 261010
E-mail:	sales@trimat.co.uk

2) COMPOSITION/INFORMATION ON INGREDIENTS

This product is a woven fabric of natural and man-made yarns with brass reinforcing wire and impregnated with a proprietary friction resin which is fully cured.

3) HAZARDS IDENTIFICATION

During its use this product will generate an amount of dust which will contain glass fibre particles. These may cause irritation to the skin and eyes on contact.

The maximum exposure for the dust generated either in operation or machining is 5mg/m³ or 2f/ml. If the dust enters the eyes treatment will be required; it may also cause slight skin irritation.

There are no known effects should the dust be ingested or inhaled.

4) FIRST AID MEASURES

In the event of dust entering the eyes they must be flushed with copious amounts of cold water. Should skin irritation occur whilst working with this product, wash the effected area with soap and water.

5) FIRE-FIGHTING MEASURES

The product itself presents no fire risk. If however a fire occurs in the vicinity, then extinguish with water. Decomposition/ Combustion Products produced are Carbon Monoxide.

6) ACCIDENTAL RELEASE MEASURES

The very nature of this product, and others within the range is such that accidental release is most unlikely if not impossible.

7) HANDLING & STORAGE

The usual precaution for manual handling i.e. the wearing of good quality fabric gloves, must be observed. The material can be stored in any dry place.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

When replacing worn brake lining, dust will be present, therefore the measures as stated in the section headed 'Other Information' must be adhered to.

9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	This material is a solid woven fabric made up of natural and man-made yarn with a brass wire reinforcement. It is impregnated with a propriety friction resin which is fully cured and light brown in colour. It gives off no odour.
Boiling Point:	The material does not have a boiling point, melting point or flash point.
Flammability:	Trimat GBC is not a flammable material, does not have a potential for autoflammability and will not explode.
Oxidizing Properties:	GBC will not oxidize.
Relative Density:	1.24.
Solubility:	Trimat GBC is insoluble in water or fat.

10) STABILITY AND REACTIVITY

Trimat GBC will remain stable when used for the purpose for which it was designed.

11) TOXICOLOGICAL INFORMATION

Oral LD₅₀, Dermal LD₅₀, and Inhalation LD₅₀ levels are such that there is nothing adverse in this product.

12) ECOLOGICAL INFORMATION

The Trimat range of products are such that they cannot have known effect (behavioural or enviromental) that can be reasonably forseen.

13) DISPOSAL CONSIDERATIONS

Trimat GBC may be disposed of with normal waste. There are no statutory notifications required. There are no known restrictions for its disposal. It is considered safe to dispose of this material at any landfill sites. There is no category/waste number.

14) TRANSPORT INFORMATION

Trimat GBC can be transported safely wrapped or boxed as supplied by the manufacturer. There are no labelling requirements.

15) REGULATORY INFORMATION

As a general precaution, eye protection suitable for dust, a non-toxic particle mask should be worn if the product is to be cut or drilled. Gloves should be worn when handling. Dust levels must be kept below 5mg/m³ (2 f.ml).

16) OTHER INFORMATION

Friction materials contain fibres and the dust formed in used brake and clutch parts will be free fibrous materials. To prevent dust particles from becoming airborne always use the following safe practises:-
When replacing worn linings remove the accumulated dust by using an industrial vacuum cleaner fitted with a high efficiency filter system. Alternatively, wipe down the components with a damp cloth.
Do not use compressed air or dry brushing to remove dust from brake and clutch parts.
When further processing new unused linings prior to workshop fitting, eg. cutting and drilling, always employ the use of local exhaust equipment where available. If not available use an industrial vacuum cleaner.
Where sweeping is necessary use a dust suppressant or water.
The appropriate personal protection should of course be worn wherever required.
Personnel who are expected to work with brake lining material must be trained in its safe handling and where necessary must be instructed in the use of personal protection equipment.

The information provided in this safety data sheet is based on present knowledge and whilst given in all good faith and intentions does not constitute a guarantee for any of the product features or establish a legally valid contractual relationship.

The details given are true and accurate provided that the product is used for the purpose for which it is designed.

Date of Publication: November, 1995

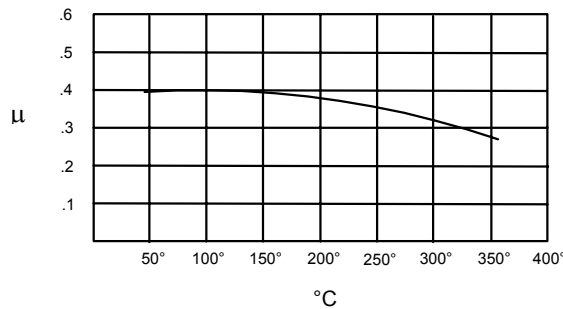
Revised: March, 2001



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PRODUCT DATA SHEET

TRIMAT MR2215



Material Description:

MR2215 has been developed for automotive brake lining, industrial brakes, crane and excavators band brake linings. It is a flexible moulded product having a non-asbestos basis of fibres in random dispersion. Selected friction modifiers are bound by a specifically developed rubber/resin binder system that has a major influence in determining both the friction performance characteristics and strength of material.

Available in either roll or strip form, MR2215 is sufficiently flexible to make fitting to curved metal parts a relatively simple operation, after which the heat generated during bonding will increase the material strength and hardness. Alternatively, MR2215 can be formed to a rigid lining prior to fitting by curing in an oven at a temperature of at least 180°C for a period of not less than 60 minutes.

Technical Details:

Property	Typical Value	Units
Coefficient of Friction (dynamic)	0.39	-
Wear Rate	22	mm ³ /MJ
Specific Gravity	2.00	-
Shore D Hardness (as supplied)	65	-
Shore D Hardness (cured)	75+	-
Ultimate Tensile Strength (cured)	15	N/mm ²
Ultimate Shear Strength (cured)	15	N/mm ²
Ultimate Compressive Strength (cured)	75	N/mm ²

Recommended Operating Range:

Maximum Intermittent Temperature	325	°C
Maximum Continuous Temperature	250	°C
Recommended Operating Pressure	0.07 - 1.5	N/mm ²
Maximum Rubbing Speed	25	m/s

Recommended Mating Surfaces:

Close grained cast iron, forged or cold rolled steel should be 180 Brinnell or over.

Available Sizes:

Nominal Roll Lengths	5 metres
Thickness	3mm to 12.5mm
Width	up to 200mm

NOTE: There is no standard test procedure for industrial Friction Materials, therefore it could be misleading to compare different manufacturers test results. The Co-efficient of Friction/Temperature Graph illustrated, should be used for comparison of the various Trimat qualities only.

1 Identification of preparation and company

- 1.1 Product Identification: **TRIMAT MR2215**
- 1.2 Company Address: TRIMAT Ltd.
Narrowboat Way
Hurst Business Park
Brierley Hill
West Midlands. DY5 1UF
ENGLAND
- 1.3 If further information is required, please contact Trimat Ltd.
Tel.: +44 (0) 1384 473400 Fax: +44(0) 1384 261010 e. mail: sales@trimat.co.uk

1 Composition/information on ingredients:

- 2.1 Rubber/resin preparation containing fillers and fibres.
- 2.2 Classified substances contained in the preparation:

<u>Substance</u>	<u>CAS No.</u>	<u>Contents</u>	<u>Classification</u>	<u>R-phrases</u>
Glass Fibre	-	< 10%	Xi	R38

3 Hazards Identification:

- 3.1 No health risks have so far been known in cases where this product has been handled and processed properly.

4 First-aid measures:

- 4.1 Skin:
If irritation occurs, do not rub or scratch. Rinse under running water prior to washing with mild soap and water.
- 4.2 Eyes:
If irritation occurs, do not rub or scratch. Flush eyes with water and consult a physician if irritation persists.

5 Fire-fighting measures:

- 5.1 The product itself presents no fire risk. If however a fire occurs in the vicinity, then extinguish with any standard extinguishing equipment/media.
- 5.2 Decomposition/Combustion Products produced are carbon monoxide, carbon dioxide and low molecular weight hydrocarbons.

6 Accidental release measures:

- 6.1 No special measures required.

7 Handling and storage:

- 7.1 The usual precaution for manual handling i.e. the wearing of good quality fabric gloves must be observed. Ensure good ventilation, otherwise refer to Section 8.
- 7.2 The material can be stored in any dry place.

8 Exposure controls/personal protection:

- 8.1 Engineering Methods:
Ensure adequate local exhaust ventilation when machining or abrading.
- 8.2 Respiratory protection:
Wear suitable protection if exposure limits may be exceeded.
- 8.3 Hand protection:
Wear good quality fibre gloves. Use of barrier creams and maintain good hygiene standards.
- 8.4 Eye protection:
Safety glasses should be worn when machining or abrading.
- 8.5 Skin protection:
Wear suitable protective clothing e.g. long-sleeved, long-legged, closed overalls.

9 Physical and chemical properties

- | | | |
|-----|------------------------------|--|
| 9.1 | Appearance: | Dark grey, flexible solid |
| 9.2 | Odour: | Little noticeable odour |
| 9.3 | pH: | n.a. |
| 9.4 | Boiling/melting point/range: | Thermoset. Decomposition will begin above 300 °C. |
| 9.5 | Flammability: | Will burn at elevated temperatures. |
| 9.6 | Auto flammability: | Not established |
| 9.7 | Explosive Properties | This preparation does not present an explosion hazard. However, dust produced from grinding operations can present an explosion hazard or fire hazard in extraction systems. |
| 9.8 | Specific Gravity: | 2.00 |

10 Stability and reactivity

- 10.1 This preparation is stable up to its decomposition temperature.

11 Toxicological information

- 11.1 The primary route of exposure is by inhalation of dust particles released as a result of machining or abrading.
- 11.2 No specific toxicological tests have been carried out on this preparation but reference should be made to the health effects of the ingredients listed in sections 2 and 3.
- 11.3 Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have found no significant evidence of non-malignant lung disease (e.g. fibrosis). The studies have not established a causal relationship between exposure to stone wool and malignant diseases (lung cancer or mesothelioma).
- 11.4 The glass fibre used in this product is non respirable due to fibre dimensions and as such does not reach the lower pulmonary tract and thus has no possibility of causing serious pulmonary disease.

12 Ecological information:

12.1 Stable product with no known adverse environmental effects.

13 Disposal considerations:

13.1 The product can typically be disposed of in ordinary landfill (national or local regulations may apply)

14 Transport information:

14.1 No special precautions.

15 Regulatory information:

15.1 Not classified as dangerous for supply/use

16 Other information:

16.1 Friction materials contain fibres and the dust formed in used brake and clutch parts will be free fibrous materials. To prevent dust particles from becoming airborne always use the following safe practices:

When replacing worn linings, remove the accumulated dust by using an industrial vacuum cleaner fitted with a high efficiency filter system. Alternatively, wipe down the components with a damp cloth.

Do not use compressed air or dry brushing to remove dust from brake and clutch parts.

When further processing new un-used linings prior to workshop fitting, e.g. cutting and drilling, always employ the use of local exhaust equipment where available. If unavailable, use an industrial vacuum cleaner.

Where sweeping is necessary use a dust suppressant or water.

The appropriate personal protection should, of course be worn wherever required.

Personnel who are expected to work with brake lining material must be trained in its safe handling and where necessary must be instructed in the use of personal protection equipment.

16.2 The information provided in this safety data sheet is based on present knowledge and whilst given in all good faith and intentions does not constitute a guarantee for any of the product features or establish a legally valid contractual relationship.

16.3 The details given are true and accurate provided that the product is used for purpose for which it is designed.

Date of Publication: September 2003

Revised:



TRIMAT MN 1046 BRAKE LINING TECHNICAL SPECIFICATION SHEET

Trimat MN 1046 is a rigid fully moulded non-metallic non-asbestos material based on random dispersion of organic and inorganic fibres together with friction modifiers in a matrix of a special phenolic resin.

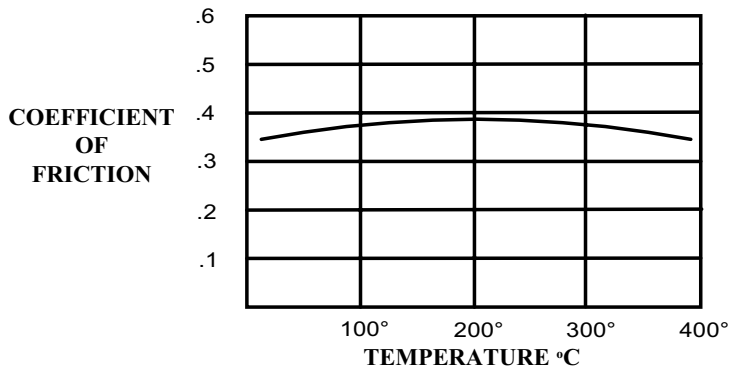
It has a medium friction characteristic and was developed specifically to have a balanced range of properties when considering such features as fade resistance, speed and pressure consciousness, kindness to ferrous mating surfaces and wear resistance.

APPLICATIONS

A very versatile material suitable for most Industrial Clutch and Brake applications requiring a non-asbestos type lining, including Power Presses for both Forging and Sheet Metal, Earth-Moving Equipment, Machine Tools etc.

The material is suitable for Gear-cutting.

NOTE: There is no standard test procedure for industrial Friction Materials, therefore it could be misleading to compare different manufacturers test results. The Co-efficient of Friction/Temperature Graph illustrated, should be used for comparison of the various Trimat qualities only.



TECHNICAL DETAILS (MEAN VALUES)

Ultimate Tensile Strength	4000 psi (280kg/cm ²)	Rockwell Hardness	82
Ultimate Shear Strength (Perpendicular)	3000 psi (210kg/cm ²)	(R Scale)	
Ultimate Shear Strength (Parallel)	3500 psi (245kg/cm ²)	Compression	1.2 percent
		Specific Gravity	1.95

RECOMMENDED OPERATING TEMPERATURE

Maximum Temperature	400°C
Maximum Continuous Temperature	300°C

RECOMMENDED MATING SURFACES

Good quality close grain or alloy cast iron. All steels, except cast, with a Brinell hardness of 200 or over.

DRILLING DETAILS

High speed drills are quite acceptable at the following speeds:

Upto 3/8" diameter	1500 revs/min with feed rate 0.010"/rev.
3/8" to 3/4" diameter	1000 revs/min with feed rate 0.007"/rev.

TURNING & BORING

Cutting angles 3° top rake. 8° front rake and 8° side rake	
Cutting Speed.....	75ft/min
Feed Speed.....	120 cuts per inch

AVAILABILITY

Flat sheets 762mm x 762mm (30" x 30") are available in thicknesses 3 to 19mm (0.125" x 0.750") other sheets and shapes available in upto a maximum thickness of 80mm (3").



MATERIAL HEALTH, SAFETY & ENVIRONMENTAL DATA SHEET

1) IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Identification:	TRIMAT MN1046
Company:	TRIMAT Ltd.,
Address:	Narrowboat Way Hurst Business Park Brierley Hill West Midlands. DY5 1UF ENGLAND
Telephone Number:	01384 473400
Fax Number:	01384 261010
E-mail:	sales@trimat.co.uk

2) COMPOSITION/INFORMATION ON INGREDIENTS

Composition	- Phenolic powdered resin with rubber modification - Rockwool fibre - Glass fibre (3mm strand) - Barytes - Rubber Crumb (granuals) - Calcium Oxide - Graphite
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Randomly dispersed and moulded under heat and pressure to form a rigid friction material.

3) HAZARDS IDENTIFICATION

During its use this product will generate an amount of dust which will contain glass fibre particles. These may cause irritation to the skin and eyes on contact.

The maximum exposure for the dust generated, either in operation or machining, is 5mg/m³ or 2f/ml. If the dust enters the eyes treatment will be required; it may also cause slight skin irritation.

Inhalation of dust should be avoided

4) FIRST AID MEASURES

In the event of dust entering the eyes they must be flushed with copious amounts of cold water. Should skin irritation occur whilst working with this product, wash the effected area with soap and water. If irritation persists seek medical advice.

5) FIRE-FIGHTING MEASURES

The product itself presents no fire risk. If however a fire occurs in the vicinity, then extinguish with water. Decomposition/Combustion Products produced are Carbon Monoxide. Any standard extinguishing equipment may be used.

6) ACCIDENTAL RELEASE MEASURES

The very nature of this product, and others within the range is such that accidental release is most unlikely. Use personal protection equipment as recommended in Section 8.

7) HANDLING & STORAGE

The usual precaution for manual handling i.e. the wearing of good quality fabric gloves, must be observed. The material can be stored in any dry place.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Methods: Ensure adequate local exhaust ventilation when machining or abrading.
 Exposure Limits: Dust levels must be kept below 5mg/m³ (2 fibres/ml)

Personal Protection:

Respiratory: Wear suitable protection if exposure limits may be exceeded.
 Hand: Wear good quality fibre gloves.
 Use suitable barrier creams and maintain good hygiene standards.
 Eyes: Safety glasses should be worn when machining or abrading.
 Skin: Wear suitable protective clothing eg: general overalls.

9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark grey, rigid.
 Odour: No noticeable odour.
 pH: Not Applicable
 Melting Point/Melting Range: Refer to data sheet maximum working temperature.
 Flammability: Does not support combustion but will burn at elevated temperatures.
 Explosive Properties: The product does not present an explosion hazard. However, dust produced from grinding operations can present an explosion hazard or fire hazard in extraction systems.
 Specific Gravity: 1.95 gms/cc

10) STABILITY AND REACTIVITY

Stability: Trimat MN 1046 will remain stable when used for the purpose for which it was designed.
 Hazardous/Decomposition: In the event of decomposition phenol, formaldehyde and cyanides may be present in minute quantities.

11) TOXICOLOGICAL INFORMATION

Short Term Effects

Inhalation: May cause irritation to upper respiratory tract.
 Ingestion: Not established
 Skin Contact: May cause temporary irritation.
 Eye Contact: May cause irritation

Chronic Effects

Inhalation: The toxicity of the man-made fibres has been assessed and it has been established that fibres which cannot enter the respiratory system will not be a factor for the induction of respiratory diseases.
 Under exposure conditions found in the application of rockwool fibres no long term health risk concerning the respiratory system has been established.
 Ingestion: Not established
 Skin Contact: Not established
 Eye Contact: Not established

12) ECOLOGICAL INFORMATION

The Trimat range of products are such that they do not have known effect (behavioural or environmental) that can be reasonably foreseen.

13) DISPOSAL CONSIDERATIONS

Trimat MN1046 may be disposed of with normal waste. There are no statutory notifications required. There are no known restrictions for its disposal. It is considered safe to dispose of this material at any landfill sites. There is no category/waste number.

14) TRANSPORT INFORMATION

Trimat MN1046 can be transported safely wrapped or boxed as supplied by the manufacturer. There are no labelling requirements.

15) REGULATORY INFORMATION

As a general precaution, eye protection suitable for dust and a non-toxic particle mask should be worn if the product is to be cut or drilled. Gloves should be worn when handling. Dust levels must be kept below 5mg/m³ (2 f/ml).

16) OTHER INFORMATION

Friction materials contain fibres and the dust formed in used brake and clutch parts will be free fibrous materials. To prevent dust particles from becoming airborne always use the following safe practices:-
When replacing worn linings, remove the accumulated dust by using an industrial vacuum cleaner fitted with a high efficiency filter system. Alternatively, wipe down the components with a damp cloth.
Do not use compressed air or dry brushing to remove dust from brake and clutch parts.
When further processing new un-used linings prior to workshop fitting, eg. cutting and drilling, always employ the use of local exhaust equipment where available. If not available use an industrial vacuum cleaner.
Where sweeping is necessary use a dust suppressant or water.
The appropriate personal protection should, of course be worn wherever required.
Personnel who are expected to work with brake lining material must be trained in its safe handling and where necessary must be instructed in the use of personal protection equipment.

The information provided in this safety data sheet is based on present knowledge and whilst given in all good faith and intentions does not constitute a guarantee for any of the product features or establish a legally valid contractual relationship.

The details given are true and accurate provided that the product is used for the purpose for which it is designed.

Date of Publication: November, 1995

Revised: March, 2001



TRIMAT MR 8728 BRAKE LINING TECHNICAL SPECIFICATION SHEET

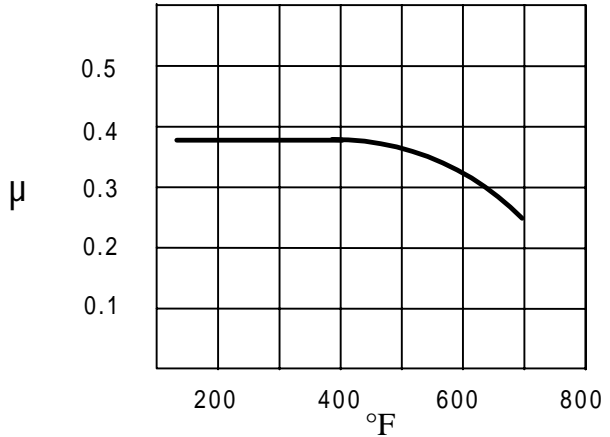
Trimat MR 8728 is a fully cured, flexible, non-asbestos, non-metallic friction material compounded with synthetic rubber.

APPLICATIONS

Trimat MR 8728 is suitable for industrial applications where a medium co-efficient of friction is required. Due to the flexibility of the material it is possible to offset any differences on radius.

The material is in a fully cured condition and is suitable for both bonding and rivetting.

NOTE: There is no standard test procedure for industrial Friction Materials, therefore it could be misleading to compare different manufacturers test results. The Co-efficient of Friction/Temperature Graph illustrated, should be used for comparison of the various Trimat qualities only.



TECHNICAL DETAILS (MEAN VALUES)

Specific Gravity = 2.1g/cm³

Shear Strength @ 68 ° F = 2600psi

Compressive Strength @ 68 ° F = 8700psi

Specific Thermal Capacity @ 68 ° F = 1.03 kJ/kg K

RECOMMENDED OPERATING TEMPERATURE

Maximum Intermittent Temperature 650° F

Maximum Continuous Temperature ... 480° F

RECOMMENDED MATING SURFACES

Close grained cast iron, forged or cold rolled steel should be 180 Brinnell or over.

DRILLING DETAILS

High speed drills are quite acceptable at the following speeds:

Upto 1/2" diameter 850revs/min with feed rate 0.005"/rev.

Over 1/2" diameter the revs/min should be reduced accordingly.

for example:

At 5/8" diameter 600 revs/min the feed rate 0.005"/rev.

AVAILABILITY

Supplied in roll form, cut and shaped linings.

Nominal Roll Lengths of 25ft up to 5/16" thick and 16ft up to 1/2"

Thickness from 1/8 up to 1/2"

Width up to 8"



MATERIAL HEALTH, SAFETY & ENVIRONMENTAL DATA SHEET FOR TRIMAT MR8728

1) IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Identification: TRIMAT MR8728
Company: TRIMAT Ltd.,
Address: Narrowboat Way
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West Midlands. DY5 1UF
ENGLAND
Telephone Number: 01384 473400
Fax Number: 01384 261010
E-mail: sales@trimat.co.uk

2) COMPOSITION/INFORMATION ON INGREDIENTS

This friction material is a multi-component system containing organic binders (resin and rubber).
Components contributing to the hazard:

CAS Number	Chemical Name	Concentration Range	Hazard Labelling	Classification
014807-96-6	Talc	5 - 10%	-	-
001309-48-4	Magnesium Oxide	5 - 10%	-	-

3) HAZARDS IDENTIFICATION

No health risks have so far been known in cases where this product has been handled and processed properly.

4) FIRST AID MEASURES

Health Effects - Inhalation

During the mechanical processing of this product, small amounts of dust may be given off. A health risk caused by inhalation does not exist if our safety instructions are observed. Persons who have been exposed to excessive quantities of dust should immediately go outside into fresh air. They should seek medical attention if coughing or other symptoms develop.

Health Effects - Skin Contact

Clean skin with soap and water. Remove contaminated clothing.

Health Effects - Eye Contact

In case of eye irritation, flush eyes immediately with plenty of water. Seek medical attention if irritation develops.

Health Effects - Ingestion

Protection of first aiders

Notes to a physician

5) FIRE-FIGHTING MEASURES

The product itself presents no fire risk. If however a fire occurs in the vicinity, then extinguish with water. .

6) ACCIDENTAL RELEASE MEASURES

The very nature of this product, and others within the range is such that accidental release is most unlikely if not impossible.

7) HANDLING & STORAGE

The usual precaution for manual handling i.e. the wearing of good quality fabric gloves, must be observed. The material can be stored in any dry place.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

Components with limit values that require monitoring at the workplace

CAS No.	Chemical Name	Type	Value	Unit
14807-96-96	Talc	MAK (Germany)	2 A	mg/m ³
001309-48-4	Magnesium oxide	MAK (Germany)	1,5 A	mg/m ³

Personal Protective Equipment

Respiratory protection

Dustproofed mask (during the mechanical processing of this product)

Hand protection

Gloves (during the mechanical processing of this product)

Eye Protection

Goggles (during the mechanical processing of this product)

Skin

Dustproof clothing (during the mechanical processing of this product)

Hygienic measures

9) PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid
Odour:	Neutral.
Change in Condition:	Melting Point - Not applicable Boiling Point - Not applicable
Decomposition temp:	> 300°C
Density:	2,1 g/cm ³

10) STABILITY AND REACTIVITY

Hazardous reactions

Conditions to be avoided

Formation of dust

Hazardous decomposition products

Carbonmonoxide, Phenole, Hydrocarbons

11) TOXICOLOGICAL INFORMATION

Not applicable

12) ECOLOGICAL INFORMATION

No data available

13) DISPOSAL CONSIDERATIONS

Trimat MR8728 may be disposed of with normal waste. There are no statutory notifications required. There are no known restrictions for its disposal. It is considered safe to dispose of this material at any landfill sites. There is no category/waste number.

14) TRANSPORT INFORMATION

Trimat MR8728 can be transported safely wrapped or boxed as supplied by the manufacturer. There are no labelling requirements.

15) REGULATORY INFORMATION

Label information according to EC-directives:

This product is not hazardous in terms of national and international regulations/provisions

R-Phrases

S-Phrases

16) OTHER INFORMATION

Friction materials contain fibres and the dust formed in used brake and clutch parts will be free fibrous materials. To prevent dust particles from becoming airborne always use the following safe practises:-

When replacing worn linings remove the accumulated dust by using an industrial vacuum cleaner fitted with a high efficiency filter system. Alternatively, wipe down the components with a damp cloth.

Do not use compressed air or dry brushing to remove dust from brake and clutch parts.

When further processing new unused linings prior to workshop fitting, eg. cutting and drilling, always employ the use of local exhaust equipment where available. If not available use an industrial vacuum cleaner.

Where sweeping is necessary use a dust suppressant or water.

The appropriate personal protection should of course be worn wherever required.

Personnel who are expected to work with brake lining material must be trained in its safe handling and where necessary must be instructed in the use of personal protection equipment.

This information is based on our present knowledge. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship.

Date of Publication: April, 1998

Revised: March, 2001