

Product Information

Version 1.21



MEET MSB



Motorsport Brakes P/L was established to supply premium brake friction products to the Australian and NZ markets. The company is now the worlds largest brake pad distributor for one of Japans most experienced manufacturers of braking products – Winmax Corp which is a subsidiary of MK Kashiyama Group, Japan.

World class racing brake pad brand CIRCO Racing Brake Pads are also distributed by Motorsport Brakes in Australia. MSB acts on behalf of CIRCO in all racing category supply including V8 Supercars, Aust Rally Championship, TA2 Muscle Cars, TCM, RX8 Cup Racing Series and more.

MSB distributes the Winmax and CIRCO world class products via a network of knowledgeable dealers. These dealers range from one-man band workshops right through to national retailers. However we at MSB are always available for personal service or back up where needed.

Specialist requirement fleet programs are something MSB excel at. A good example of this is our work supplying specially developed bespoke friction material and brake fluids to the Police Force in Queensland, NSW, Victoria and WA.

MSB is a business dealing in quality products offering personal service focused entirely on quality and rapid response to crucial requirements in specialist fields including Motorsport, street performance, OEM. Fleet and Government.

We believe we are the most knowledgeable and helpful high performance and competition brake supplier around, so give us a try!



Company Director





Technical Director













WHAT WE DO

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MOTORSPORT

Motorsport Brakes existing range of brake pad compounds covers almost all areas of world motorsport. We are capable of supplying categories from club level right through to FIA world championship organisations.

4x4 and PERFORMANCE

Our product range caters to every area of performance vehicles, including street, tuning, enthusiast, club, rally, circuit and also the growing Performance 4x4 Heavy Duty market. Our brake pad range covers almost 1,800 applications, and counting.

DISTRIBUTION

All Australian distribution of Winmax and Circo products is warehoused at the MSB base in Yatala, Queensland. The business operates inventory management software which allows for B2B access by Trade and Wholesale partners for all stock and 'overnight' purchases.

FLEET

Brake pads for fleet vehicles requiring a heavy duty performance level are easily serviced by MSB. With access to a large resource of brake pad compounds, MSB helps with fleet requirements in government sectors such as Police, Ambulance, Fast Response, as well as mining and courier services.

OEM MANUFACTURING

Motorsport Brakes represents Winmax Corporation in OEM white label manufacturing. We will advise and broker supply agreements for brake pads manufactured at Winmax, in Japan, to required specifications. Full NDA are arranged for these programs and the customer will deal commercially with Winmax, which effectively removes the 'middle man'.

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WE ARE PROUD MEMBERS OF:



OUR PREFERRED CHARITY:



MANUFACTURING







Winmax and CIRCO brake pads are all manufactured 100% in a state of the art facility in Nagano prefecture, Japan. MK Kashiyama is the parent company of Winmax Corp and is situated in the same complex as their performance arm—Winmax.

The Winmax factory takes care of the entire manufacturing process in-house. This includes purchasing steel products, blending, moulding, processing, and shipping. Winmax also manufacture the machines the pads are made on, and produce the packaging! This integrated production system provides a stable supply of world class, high quality products.

COMPOUNDS

The greatest strength of the Winmax factory is in-house research and development and manufacturing of friction materials. The performance of the raw materials used for friction materials varies greatly depending on the composition, purity, particle size, length and thickness of the fibres. From a wide variety of combinations of these materials, data is used and accumulated.



PRODUCTION FLEXIBILITY

The production line is particularly good at handling high-mix, small-lot production, placing more emphasis on the stability of each product than on mass production, and using the single unit moulding method (one piece at a time). This production method enables the production of stable products with no variation in mould temperature distribution or moulding pressure.



PERFORMANCE ANALYTICS

Winmax were the first brake pad manufacturer in Japan to introduce and develop full-size dynamo and noise dynamo testers for aftermarket brake pads. In the dynamo tests, the vehicle speed, brake fluid pressure, and rotor temperature are changed in a test pattern simulating town or circuit driving, etc., to confirm the consistency and performance of friction coefficient, torque characteristics, etc., to evaluate squeal performance, to confirm the amount of pad and rotor wear and to confirm crack resistance.



EVALUATION AND QUALITY

Winmax's brake pads have been evaluated by professional drivers in various categories not only in Japan but also in other parts of the world through our unique network.

There are strict in-house standards for each of these items, and if a product does not meet these standards, it will not be released to the market.



START SELLING OUR PRODUCTS

As well as ensuring we only supply the very best quality products, we are always working to make things easier for our customers, dealers and wholesalers. Our business has advanced inventory management, B2B (see below), a bespoke web parts finder tool, integrated shipment tracking and more.

Most importantly we have a phone number at the top of our website so you can always pick up the phone and speak to us! That's right—a human who knows what they are talking about. Just to be sure, the number is 07 3412 3643. Ask for Jason, Marty or Judy.

MAKING IT EASY

At MSB we realise you have better things to do than trawl through information trying to find the right product for your customer and then spend time calling multiple suppliers.

So we are striving to simplify that process. We have built a B2B 'backend' system that will help you do the following very quickly:

- 1. Find the right product fitment
- 2. Select the right pad compound
- 3. Check availability, retail price and your cost
- 4. Order parts and track the shipment

MSB's B2B system allows you to do all of this with ease, even whilst you have the customer on the phone or in your workshop or office.

FREE FREIGHT

MSB B2B has a free freight offer when parts are ordered on this system only. All orders over \$500 attract no freight charge. In most cases, this can be as few a 2-3 sets of pads and once you are up and running with our products you will want more than that!

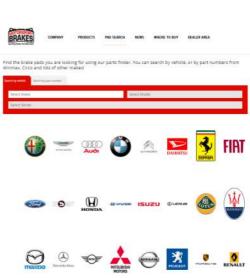
PARTS FINDER

Our website also offers plenty of information you will find useful when supplying our products. The B2B system is our inventory, and the Parts Finder on www.motorsportbrakes.com.au is the catalogue for ALL parts manufactured by us.

DEALER STRUCTURE

Each of our products have a recommended retail price and we offer trade and dealer price levels. Each new dealer is placed on a one of these levels depending on a number of factors including volumes, market segment, opportunities and more.





SUZUKI SUZUKI

SOME OF OUR CUSTOMERS

Motorsport Brakes operates in almost all fields of braking. We specialise in many segments including street performance, bespoke, OEM manufacturing, category control supply, professional motorsport and more. Below are some of our customers in recent years with more to come.



































































4x4 HIGH PERFORMANCE

The WINMAX WP2 brake pad is aimed at the customer who needs serious stopping power in their heavy vehicle brake system. WP2 is a high friction performance compound that will perform far superior to any pads you have tried in you 4x4 or tow vehicle.



WINMAX WP2 are designed as a high performance 4x4 brake pads to outperform other products in this market segment.

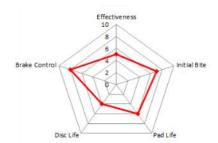
Most 'Heavy Duty' pads are not very heavy duty, and rely on you as the customer not doing anything too stressful to their brakes! WP2 is designed to deal with more punishment than most will try to throw at their vehicle.

Towing a boat, race car, caravan or a heavy tradie trailer? Had a GVM upgrade? Or you just like to use your vehicle as it was designed? You need to choose WINMAX WP2 Brake Pads.

Notes:

High Performance 4x4, Towing, GVM Upgrade

Material: **Semi metallic** Friction: **0.36 – 0.39μ** Temp range : **0 – 600°C**







WP2 RANGE



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	Part No.	Popular vehicle fitments	Front / Rear
	WMP287-WP2	Nissan Patrol Y61, GU	Front
	WMP229-WP2	Nissan Patrol Y61, GU	Rear
	WMP241-WP2	Toyota 4 Runner, Hilux, Hilux Surf, Landcruiser 70	Front
	WMP252-WP2	Toyota Landcruiser 75, 80, 100	Front
	WMP253-WP2	Toyota FJ Cruiser, Landcruiser, Prado, Mitsubishi Pajero	Rear
	WMP402-WP2	Lexus LS, LX, Toyota Landcruiser 75, 78, 79, 80, 100, 109	5 Front
	WMP1155-WP2	Nissan Navara D22, D40	Front
	WMP1195-WP2	Holden Colordo, Rodeo, Isuzu D-Max	Front
	WMP623-WP2	Toyota FJ Cruiser, Prado, Mitsubishi Pajero	Front
	WMP1174-WP2	Toyota Hilux N10-N30	Front
	WMP664-WP2	Nissan Navara, Pathfinder	Front
	WMP697-WP2	Toyota Landcruiser 200 series, Tundra	Front
	WMP698-WP2	Toyota Landcruiser 200 series, Tundra	Rear
	WMP1358-WP2	Ford Ranger PX, Mazda BT-50	Front
	WMP089-WP2	Toyota Hiace, Hilux, Dyna	Front
	Coming soon	VW Amarok, Mercedes X-Class	

*Winmax WP2 is available in any shape by order Contact MSB for a detailed fitment and price list.



STREET UPGRADE

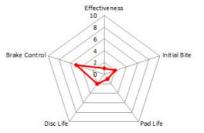
Use these pad options for those cars not seeing any track work. Our pads for street use are designed to improve the experience and stopping power for road going performance cars. Manufactured using organic materials, these pads are non-metal so low in dust and noise properties.



Organic based material brake pads suitable for performance street use. Low dust, low noise properties make this pad popular for those looking to upgrade standard brake pads for something with more oomph!

Notes: Street use / Step up from OEM / Performance minded drivers / Not for track use.

Hint: Use Winmax W1 instead of Endless NS97, Ferodo DS Performance, Pmu NS-EP, Bendix Ultimate





LIMITED RANGE SPECIAL ORDER AVAILABLE

Winmax W2 brake pads are another organic based material like W1, but suitable for heavy duty street and performance use. W2 is a heavy duty street pad which is excellent for fast street cars such as C63 Mercedes, Nissan R35, Jeep SRT and also suitable for some 4x4 applications.

Notes: Heavy Duty Street / OEM upgrade brake pads for High performance cars / Performance, light trackwork ok

Hint: Use Winmax W2 instead of Dixcel X Type, Endless MX72, Pmu NS



PERFORMANCE

The Winmax Performance pad range is designed for those getting a little more serious with the braking performance of their car. In some cases track day use is ok, as well as some heavy duty and towing applications. In some cases noise and dust is more than street pads, but performance is the priority.



Winmax W3 brake pads are a semi-steel based compound suitable for performance and light trackday use such as sprints. Low steel properties means this pad is popular for those looking to upgrade to exceptional performance without compromising on too much comfort. Very strong street option with excellent pedal feel.

Notes: Enthusiast / High Performance OEM upgrade / brake pads for Performance / Trackdays / Low level Motorsport.

Hint: Use Winmax W3 instead of Pmu HC-EP, Dixcel Z Type, Ferodo DS2500. Hawk HP+





LIMITED RANGE SPECIAL ORDER AVAILABLE

Winmax W4 brake pads are a semi-steel based compound suitable for track use in low to mid level competition environments. Used in racing conditions by small cars and heavier cars doing limited laps. W4 is ideal for the track enthusiast wanting bang for bucks!

Notes:

Track and Enthusiast racing / Ideal for small to medium track cars / Low to Mid level Motorsport.

Limited range, mainly special order



COMPETITION

Brakes pads in this category are usually used on the broadest range of competition - from club racing enthusiasts through to State and National circuit racing, rally, hill climb, sprint and time attack. These compounds are sometimes used in professional motorsport and cross over.



Notes: Club Racing / Rally / Performance upgrade brake pads / trackday / sprint racing / Competition, Performance pads / May be noisy for street use.

Hint: Use Winmax W5 instead of Pmu RC09, Ferodo DS3000, Hawk DTC60, CL RC6, Pagid RS4-2





Effectiveness

Winmax W6.5 brake pads are a steel based compound designed for use in circuit and rallying. W6.5 is also an excellent sprint circuit or short course style pad. This compound is extremely consistent throughout the temperature range offering the driver repeatable brake pedal performance and confidence.

Notes:

Rally and Sprint / Competition brake pads / Hillclimb / Motorsport pads / Tarmac and Gravel

Hint: Use Winmax W6.5 instead of Endless ME20, Ferodo

DS2.11, CL RC8, Pagid RST5, PFC11



MOTORSPORT

The Motorsport pad options from CIRCO cover a broad range of applications and in most cases can cross over depending on the application and requirements. Speak to us about the best option for your car.



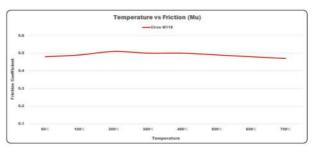
Material Carbon Metallic

Friction $0.48 - 0.51 \mu$

Temp range 50 - 800°C



CIRCO M119 is a specially formulated brake pad for gravel and tarmac rally use, as well as circuit racing where low temperature performance is required and when warm up is limited. The compound has been rigorously tested in top level machinery including WRC, S2000 and GpN as well as historic. M119 displays excellent resistance to fade for those longer stages and races, whilst offering brilliant levels of low temperature friction.



Notes: High friction levels even at cold temperatures / High temperate ability / Suitable for club rally to WRC! / Excellent modulation for driver control / Low fade characteristics for long stages



 $0.30 - 0.38\mu$

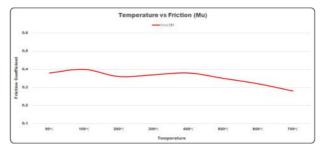
Material Low metal

Temp range 0 - 600°C

Friction



CIRCO S83 is a compound designed to work well in rear applications for front or rear wheel drive circuit cars. The friction levels are moderate with no increase in bite, and have a favourable fall away towards the end of stops when temperatures are rising. This allows for controllable stops without the likelihood of rear locking.



Notes: Notes: Rear applications for Circuit / Tapers off at higher temps / Good pad wear / Good disc condition





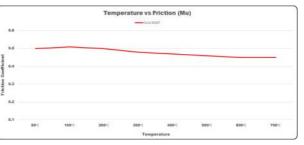
Material Carbon Metallic

Friction $0.45 - 0.56\mu$

Temp range **250 – 920°C**

M207 is the Heavy Duty brake pad in the CIRCO range. This pad has exceptionally consistent torque characteristics at all temperatures making it a must have for professional circuit racing at the very highest levels. M207 is extremely capable at higher temperatures where other compounds simply give up. Whilst not originally intended as an endurance compound, M207 has been very popular in mid-enduro's such as Bathurst 6hr.





Notes: Extremely stable friction levels / High temperate ability – up to 920degC / Suitable for professional and endurance racing / Best modulation for driver control



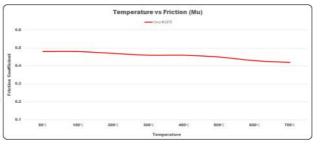
Material Carbon Metallic

Friction $0.42 - 0.49 \mu$

Temp range 150 – 900°C

M207E is the Heavy Duty Endurance brake pad in the CIRCO range and has been developed from the very successful M207 race compound. Like M207, this pad has exceptionally consistent torque characteristics but with lower overall torque levels and extremely good wear rate. With temperatures in a good range this pad has shown wear rates of around 0.5mm per hour in full race conditions.





Notes: Extremely stable friction levels / High temperate ability – up to 920degC / Suitable for professional and endurance racing 12 Hours +

BRAKE FLUID

Without a capable brake fluid your cars performance is limited, regardless of pad capability. Winmax Brake Fluid is amongst the best quality anywhere in the World. By using BF-Racing you are doing everything possible to ensure hydraulic stability in your braking system.

WinmaX.

New manufacturing method meaning lower rate of moisture absorption

Dot 5.1 Fully Synthetic

Dry Boiling Point: 338°C / 640°F Wet Boiling Point: 212°C / 413°F

- Consistent brake pedal feel
- Very high resistance to boiling
- Longer service life than other race fluids
- Fantastic all round brake fluid

This brake fluid maintains high boiling point throughout it's life due to atomic bonding technology in use at Winmax. It is designed to be used in the most severe motorsport conditions where regular disc brake temps reach over 800°C but also suitable for the performance road car application. Use for all motorsport and high performance street applications.

Winmax BF Racing fluid is supplied in 0.5 and 1 litre bottles.







BF Racing 0.5 ltr bottles

BF Racing 1 Itr bottle

BRAKE BEDDING

Correct brake pad bedding procedure is essential to ensure maximum performance and reliability in your brake system. Incorrect bedding can lead to excessive decrease in pad and disc life, as well as a general lack of expected performance.

BEDDING SERVICE

MSB offers a brake bedding service for all brake pad shapes. We use a bedding machine that runs the pads on a disc for a pre-programmed time, temperature etc depending on the pad compound and pad mass. For customers requiring pre-bedding of brake pads please allow 3-4 days for this service.



DIY BEDDING GUIDE

Correct brake pad bedding is achieved by gradual temperature increases to the brake system, while avoiding overheating and possible 'glazing'. This process stabilises the pad material so it is ready for use.

The first step is to ensure pads are installed in the car correctly, and discs are in good condition and free of any contaminants such as grease.

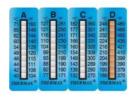
- Drive the car to around 80kph and decrease to 20kph using approx 70% pedal pressure.
 Do this 7-8 times.
- Repeat this procedure from 120kph to 80kph. Do this 5 times.
- Repeat this procedure from 120kph to 20kph. Do this 5 times.
- Following each set of stops, allow the brakes to cool for a few minutes to ensure no overheating during the procedure.
- Finally, allow the brakes to cool by driving using them as little as possible before parking the car
 and allowing it to fully cool to ambient.
- Do a visual check to ensure the brakes look like they have matched to the disc nicely.

Once cooled, you are good to go!

ACCESSORIES

MSB can access parts you may need that are specialist components. Some of these product ranges are temp stickers, brake bleeder parts etc. Enquire with MSB.



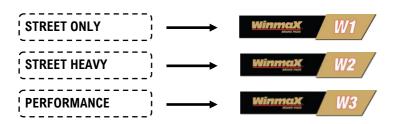




COMPOUND SELECTION GUIDES

Use these guides as exactly that—a guide. One of the things we pride ourselves on at MSB is steering our customers into the <u>right pad compound for them, and their specific application</u>. If you are not sure about which pad to use please feel free to contact us for advice.

STREET UPGRADE AND PERFORMANCE TUNING



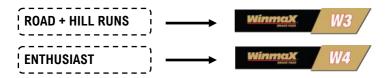
Notes:

Winmax W1 and W3 are ranged items so should be available in most required applications. Winmax W2 is a limited range product and works best in certain fitments so will not always be available 'off the shelf' in all shapes. Please check with us!

4x4 OFF ROAD, HEAVY DUTY, TOWING



HIGH PERFORMANCE



Notes:

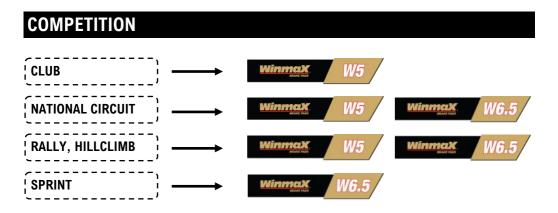
Winmax W4 is limited range product so make sure you check with MSB on availability. They are designed for specific applications and fitment for which they are kept on the shelf. As an example, W4 is a popular pad for Hyundai Excel X3 circuit racing!

Hints: As a general rule:-

FWD cars, use 1-2 'steps' lower compound in the rear. E.g. Corolla

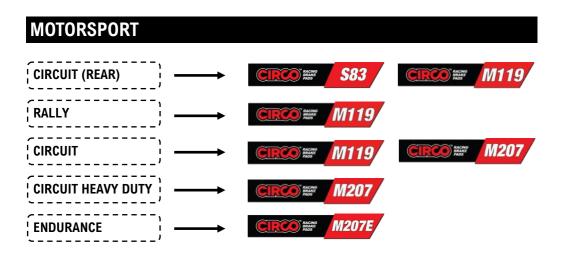
RWD cars, use the same or 1 step lower compound. E.g Supra

4WD cars, use the same compound front and rear. E.g Lancer Evo



Notes:

This section is probably the most complicated when it comes to compound selection as there are so many factors in determining the right choice of pad. For example, you may decide to run W6.5 front, W3 rear in a certain type of vehicle, or maybe 'over specify' the pads because of what your customer is doing. E.g. A Lemons race! Whatever the case, call us if you are unsure.





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