



Marigold Pump & Valve Packings



About AG

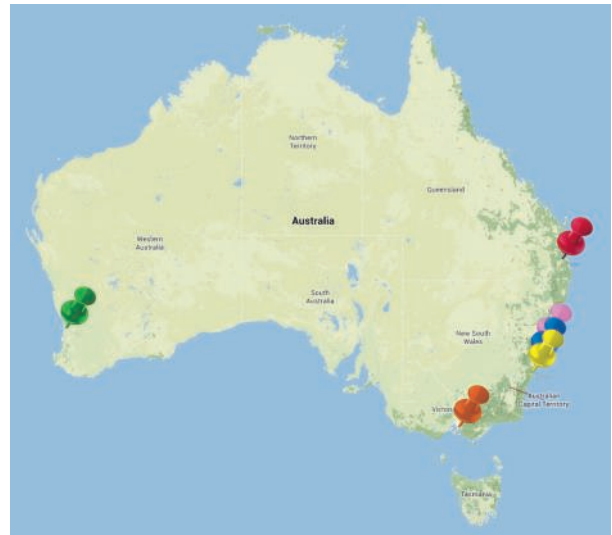
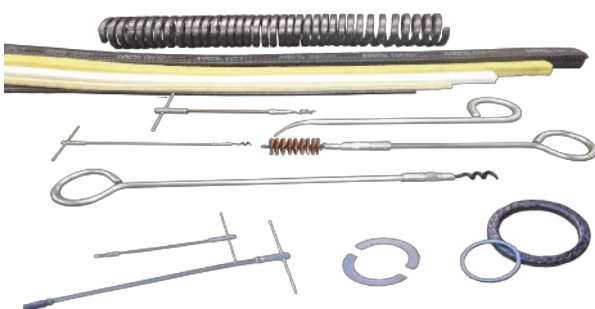
Founded in 1965 and 100% Australian owned, Associated Gaskets has a long standing reputation in Australian industry for providing high quality products and exemplary service. As our range of products has continued to expand over the years, our focus remains on providing the very best service possible.

Today, AG offers a truly comprehensive range of gaskets, seals, thermal and electrical insulation, adhesives and sealants, technical sprays, liquids and industrial tapes. We couple this enormous range with extensive fabrication facilities and large stock holdings spread amongst our 6 locations; Brisbane, Melbourne, Perth, Wollongong, Newcastle and our Sydney (head office).

If you would like any more information on any of the packing listed in this guide, or any other product in AG's versatile range, please don't hesitate to contact your local AG branch.

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Marigold 300

Description: Aramid filament is impregnated with PTFE and an inert lubricant then braided into a dense, resilient packing.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

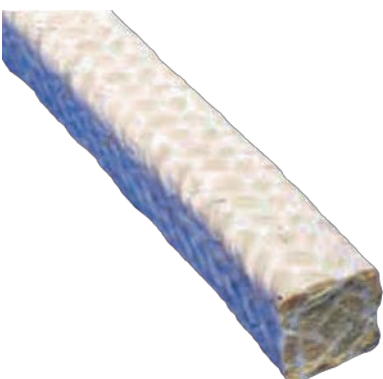
Temperature: 260°C (500°F)

pH Range: 2 - 12

Shaft Speed: 12 MPS (2500 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Pump and valve packing for moderate uses. The high tensile strength of Aramid makes this packing ideally suited for slurry and abrasive service.



Marigold 300SA

Description: Spun aramid fibre is impregnated with PTFE suspenoid and a non-silicone break-in lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 2 - 12

Shaft Speed: 12 MPS (2500 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Strong enough to handle the toughest abrasive applications, this packing is an economical and more forgiving alternative to many aramid filament grades.



Marigold 310

Description: White meta-aramid fibre is impregnated with PTFE suspenoid and a break-in lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 1 - 12

Shaft Speed: 10 MPS (2000 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Pliable and abrasion resistant, this packing stands up to chemical attack and break down. Suitable for agitators, mixers and stock pumps (amongst other applications).



Marigold 320

Description: Kynol, a type of phenolic fibre, is impregnated with PTFE suspenoid and a special, non-contaminating break-in lubricant is added.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 1 - 13

Shaft Speed: 10 MPS (2000 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Moderate pump and valve services. Not suitable for sulphuric acids or strong bases.



Marigold 344

Description: PTFE fibre impregnated with PTFE suspensoid. Braided into a dense packing with a low coefficient of friction that reduces the need for adjustment after installation.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: N/A

Pressure: 20 BAR (300 PSI)

Applications: Extreme chemical valve service



Marigold 344BIL

Description: Pure PTFE fibre is impregnated with PTFE suspensoid and an inert break-in lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 7 MPS (1500 FPM)

Pressure: 20 BAR (300 PSI)

Applications: A soft but dense packing for extreme chemical pump services. Not for use with molten alkalis.



Marigold 344BIL-SC

Description: Pure PTFE fibre is impregnated with PTFE suspensoid and an inert break-in lubricant with a rubber core.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 7 MPS (1500 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Same as 344BIL but designed for worn shaft applications requiring greater compression recovery from shaft deflection.



Marigold 344FDA

Description: Pure interlock braided PTFE fibre meeting FDA standards.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 7 MPS (1500 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Applications requiring an FDA grade packing for pharmaceutical or food contact. Complies with FDA and USDA Title 21 Food and Drug usage.

Marigold 344-SC

Description: Same as Marigold 344 but with a silicone rubber core.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 6 MPS (1200 FPM)

Pressure: 20 BAR (300 PSI)

Same as Marigold 344 but designed for worn shaft

Applications: applications requiring greater compression recovery from shaft deflection.

Marigold 344T

Description: Pure PTFE fibre is impregnated with PTFE suspenoid and an inert break-in lube. Also available without lubricant.

Construction: Hollow braided and calendered to shape

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: N/A

Pressure: 20 BAR (300 PSI)

Applications: A flexible and conformable gasket tape for glass lined and other forms of chemical equipment.

Marigold 345

Description: High quality flax and ramie fibres are impregnated generously with PTFE suspenoid and an inert lubricant.

Construction: Plait Braided

Temperature: 121°C (250°F)

pH Range: 5 - 9

Shaft Speed: 6 MPS (1200 FPM)

Pressure: 13 BAR (200 PSI)

Applications: Used in marine applications (such as stern tubes and rudder posts) that require a conformable, highly economical packing.

Marigold 359

Description: Unique packing designed to handle the specific needs of the chemical transportation industry.

Construction: Braided PTFE jacket over polypropylene fibres and PTFE wrapped elastomeric core.

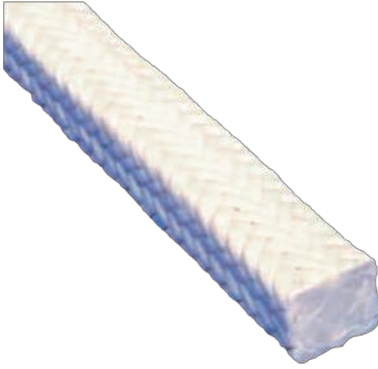
Temperature: 121°C (250°F)

pH Range: 0 - 14

Shaft Speed: N/A

Pressure: 0.7 BAR (10 PSI)

Applications: Used to seal tank covers, hatches and lids through repeated cycles against aggressive chemicals. Meets US Coat Guard requirements for lid sealing.



Marigold 360

Description: FDA compliant PTFE hybrid yarn with high speed lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 15 MPS (3000 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Utilising the latest PTFE hybrid yarn technology, this packing exhibits ultra high thermal conductivity while maintaining FDA CFR 177.1550 compliance.



Marigold 895

Description: Soft, annealed copper wire is plait braided into a dense yet highly flexible packing.

Construction: Plait Braided

Temperature: 815°C (1500°F)

pH Range: 4 - 10

Shaft Speed: 5 MPS (1000 FPM)

Pressure: 69 BAR (1000 PSI)

Applications: Used for anti-extrusion rings.



Marigold 921

Description: Quality flax and ramie fibres are impregnated with tallow and wax lubricants.

Construction: Plait Braided

Temperature: 104°C (220°F)

pH Range: 5 - 9

Shaft Speed: 6 MPS (1200 FPM)

Pressure: 10 BAR (150 PSI)

Applications: Cold water, brine and marine applications such as stern tubes and rudder posts.



Marigold 921G

Description: Same as Marigold 921 but with a surface lubricated with graphite to reduce friction.

Construction: Plait Braided

Temperature: 104°C (220°F)

pH Range: 5 - 9

Shaft Speed: 6 MPS (2000 FPM)

Pressure: 10 BAR (150 PSI)

Applications: Heavy duty hydraulic packing for marine applications involving cold water or oil. Also available with waterproof coating as 921WPH or with Moly as 921M.

Marigold 3000G

Description: A special acrylic yarn blend is impregnated with a high temp lubricant and finished with particulate graphite coating.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 4 - 10

Shaft Speed: 7 MPS (1500 FPM)

Pressure: 20 BAR (300 PSI)

Applications: An economical, general service graphite packing for moderate pump and valve service.

Marigold 3000N

Description: A special acrylic yarn is impregnated with PTFE suspensoid.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 12

Shaft Speed: 11 MPS (2200 FPM)

Pressure: 34 BAR (500 PSI)

Applications: A tough, economical packing for pumps, valves and static seals. Designed for use where contamination from break-in lubricants is not permitted.

Marigold 3000T

Description: Special acrylic yarn is impregnated with PTFE suspensoid. An inert lubricant is added for ease of start-up.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 260°C (500°F)

pH Range: 0 - 12

Shaft Speed: 12 MPS (2500 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Premium grade, general purpose pump and valve packing. Thoroughly impregnated with PTFE and proprietary break-in lubricants.

Marigold 3000T-K

Description: Acrylic yarn impregnated with PTFE suspensoid, aramid corners and an inert lubricant for ease of start-up.

Construction: Interlock Braided

Temperature: 260°C (500°F)

pH Range: 2 - 12

Shaft Speed: 11 MPS (2200 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Non-contaminating packing for pumps requiring the high-speed traits of acrylic yarn and the abrasive resistance of aramid.



Marigold 3030INA

Description: A high temperature valve stem and expansion joints packing.

Construction: Inconel® inserted, heat stabilised fibreglass yarn is braided over a homogenous graphite core. Corrosion inhibitors are added with a high temperature graphite finish.

Temperature: 649°C Steam / 455°C Air pH Range: 2 - 13

Shaft Speed: N/A Pressure: 207 BAR (3000 PSI)

Applications: General service, high temp and pressure packing used with steam, gases and in hydrocarbon applications.



Marigold 4000

Description: Non-staining carbon yarns are impregnated with PTFE as a blocking agent and a high temperature break in lube.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 315°C (600°F) pH Range: 0 - 14

Shaft Speed: 15 MPS (3000 FPM) Pressure: 248 BAR Valves
34 BAR Pumps

Applications: Pump and valve packing for applications where a high quality, non-staining, non-contaminating packing is required. Ideal for the pulp and paper industry.



Marigold 4000G

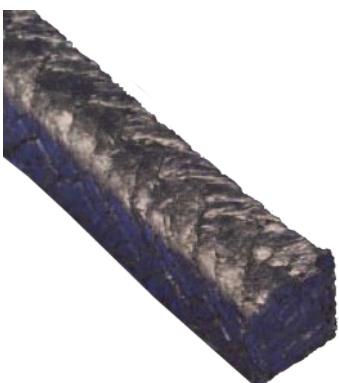
Description: Carbon yarns are impregnated with a blocking agent and a high speed break-in lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM) Pressure: 300 BAR Valves
34 BAR Pumps

Applications: High temperature pump and valve packing for use with solvents, petrochemicals, mild acids and alkalis.



Marigold 5000

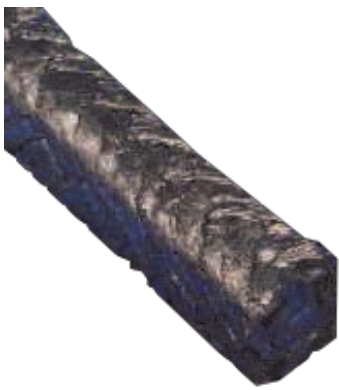
Description: Braided from pure expanded flexible graphite.

Construction: Plait Braided

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM) Pressure: 207 BAR Valves
34 BAR Pumps

Applications: A virtually leak free, flexible graphite packing with low friction, excellent heat transfer and chemical resistance. Also available in lattice braid as 5000LB.



Marigold 5000C / Marigold 5000CC

Description: Same applications as Marigold 5000 but 5000C has corners made of carbon yarn and 5000CC has a carbon core.

Construction: Plait Braided

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM) Pressure: 207 BAR Valves
34 BAR Pumps

Applications: Same as Marigold 5000 with higher extrusion resistance.



Marigold 5000I

Description: High quality flax and ramie fibres are impregnated generously with PTFE suspenoid and an inert lubricant.

Construction: Plait Braided

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: N/A Pressure: 310 BAR (4500 PSI)

Applications: Used in marine applications (such as stern tubes and rudder posts) that require a conformable, highly economical packing.



Marigold 5000IJ

Description: Ultra low emission Inconel® jacketed flexible graphite.

Construction: Plait Braided

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: N/A Pressure: 448 BAR (6500 PSI)

Applications: An ultra low leakage flexible graphite packing designed for use with LDAR programs where EPA compliance and low emission certification is required.



Marigold 5000-OCC

Description: Braided from pure expanded flexible graphite with outside carbon yarn corners.

Construction: Interlock Braided

Temperature: 649°C Steam / 455°C Air pH Range: 0 - 14

Shaft Speed: 24 MPS (4800 FPM) Pressure: 344 BAR Valves
34 BAR Pumps

Applications: Extreme pump and valve applications requiring superior extrusion and abrasion resistance.



Marigold 5000T

Description: Flexible graphite yarn impregnated with PTFE and an inert lubricant. High density packing with excellent anti-extrusion characteristics.

Construction: Plait Braided

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Excellent multi-purpose packing for pumps and valves, with good chemical resistance and heat dissipation properties.



Marigold 8000

Description: Pure nuclear grade graphite filament is braided and treated with a special graphite coating to eliminate fraying.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

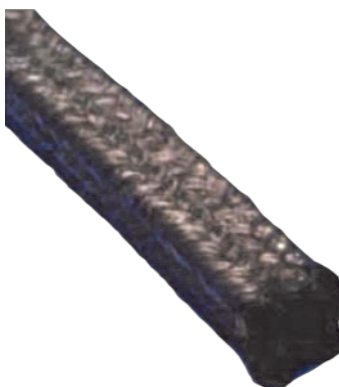
Temperature: 649°C Steam / 455°C Air

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 276 BAR Valves
34 BAR Pumps

Applications: For extreme valve service, can be used effectively as a wiper ring or cushioning ring. Testing and nuclear certification available upon request.



Marigold 8000G

Description: Pure graphite yarns are impregnated with a proprietary blocking agent. High quality graphite lubricant is added.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 649°C Steam / 455°C Air

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 172 BAR Valves
34 BAR Pumps

Applications: Pump and valve packing for extreme temperatures or aggressive chemical applications with high shaft speeds.



Marigold 8000LC

Description: Industrial grade graphite filament treated with a special graphite coating to eliminate fraying.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 649°C Steam / 455°C Air

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 276 BAR Valves
34 BAR Pumps

Applications: Economical graphite pump and valve packing for extreme temperatures or aggressive chemical applications.

Marigold 8000T

Description: W.L. Gore's patented GFO® fibre yarn is braided into a dense but conformable packing. Made from 100% GFO® Fibre.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 21 MPS (4300 FPM)

Pressure: 138 BAR Valves
20 BAR Pumps

Applications: Multi-purpose packing for acids, alkalis, solvents and steam.

Marigold 8000TLB

Description: High quality graphite and PTFE with a proprietary, high-speed break-in lubricant.

Construction: Interlock Braided

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 21 MPS (4300 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Used in valves, centrifugal pumps, high speed rotary and reciprocating pumps that require high extrusion resistance, chemical resistance and heat dissipation properties.

Marigold 8000T-K

Description: GFO® fibre yarn is braided with reinforcing aramid corners.

Construction: Interlock Braided

Temperature: 260°C (500°F)

pH Range: 2 - 12

Shaft Speed: 12 MPS (2500 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Combined the attributes of both materials produces a self-lubricating pump packing with excellent abrasion and extrusion resistance.

Marigold 8000T-SC

Description: GFO® fibre yarn braided over a silicone rubber core.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 21 MPS (4300 FPM)

Pressure: 138 BAR Valves
20 BAR Pumps

Applications: Excellent multipurpose packing for applications requiring greater compression recovery from shaft deflection.



Marigold 8000T-WO

Description: Proprietary, unique combination of self lubricating and abrasion resistant yarns with good resistance to high shaft speed.

Construction: Interlock Braided

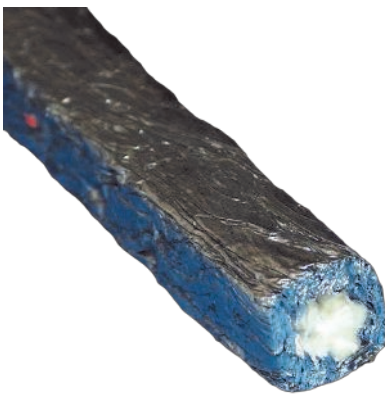
Temperature: 260°C (500°F)

pH Range: 0 - 14

Shaft Speed: 15 MPS (3000 FPM)

Pressure: 124 BAR (1800 PSI)

Applications: Centrifugal, Rotary and Reciprocating Pumps as well as Valves and other static applications.



Marigold 8010 / Marigold 8012

Description: Anti-friction lead foil is twisted over a soft fibreglass core. High temp oil and graphite lubricant is added. 8012 has no core.

Construction: Lead foil twisted over soft core (no core for 8012)

Temperature: 232°C (450°F)

pH Range: 4 - 10

Shaft Speed: 18 MPS (3600 FPM)

Pressure: 69 BAR (1000 PSI)

Applications: Boiler feed pumps or end rings in conjunction with other packing where packing extrusion is evident.



Marigold 8011 / Marigold 8013

Description: Anti-friction aluminium foil is twisted over a fibreglass core. High temp. oil and graphite lubricant added. 8013 has no core.

Construction: Aluminium foil twisted over soft core (no core for 8013)

Temperature: 538°C (1000°F)

pH Range: 4 - 10

Shaft Speed: 10 MPS (2000 FPM)

Pressure: 69 BAR (1000 PSI)

Applications: For use with boiler feed pumps, abrasive solutions and as anti-extrusion rings.



Marigold 8100BIL

Description: PTFE/Graphite fibre is braided then thoroughly impregnated with a proprietary high speed lubricant.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 24 MPS (4900 FPM)

Pressure: 20 BAR (300 PSI)

Applications: Excellent pump packing with unique fibre traits that provide better abrasion resistance and anti-extrusion properties than similar materials.



Marigold 8100BIL-K

Description: PTFE/Graphite fibre is braided with reinforcing aramid corners and an additional lubricant.

Construction: Interlock Braided

Temperature: 260°C (500°F)

pH Range: 2 –12

Shaft Speed: 12 MPS (2500 FPM)

Pressure: 34 BAR (500 PSI)

Applications: Excellent pump packing for applications requiring greater abrasion and extrusion resistance than standard PTFE/graphite packings.



Marigold 8200BIL

Description: PTFE/Graphite fibre is braided into a high density packing.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 288°C (550°F)

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 138 BAR Valves
20 BAR Pumps

Applications: An economical, multi-purpose PTFE/Graphite packing for applications that require good thermal conductivity and chemical resistance.



Marigold 8500

Description: Carbon yarn coated with PTFE and graphite.

Construction: Interlock Braided (3.2mm and 4.8mm are plaited)

Temperature: 649°C Steam / 455°C Air

pH Range: 0 - 14

Shaft Speed: 20 MPS (4000 FPM)

Pressure: 310 BAR Valves
34 BAR Pumps

Applications: Premium multi-purpose pump and valve packing for the most aggressive, demanding applications.



Marigold 9907

Description: Volumised and twisted electrical grade fibreglass is impregnated with a special blend of graphite, proprietary break-in lubricant and corrosion inhibitors.

Construction: Plait Braided

Temperature: 500°C (932°F)

pH Range: 2 - 12

Shaft Speed: 1 MPS Valves

10 MPS Centrifugal Pumps

Pressure: 200 BAR Valves
20 BAR Pumps

Applications: Durable packing versatile enough to handle many centrifugal, rotary and reciprocating pump and valve applications.



Marigold 9944

Description: Electrical grade fibreglass impregnated with a specialised blend of PTFE and a proprietary, inert lubricant.

Construction: Interlock Braided

Temperature: 280°C (536°F)

pH Range: 2 - 12

Shaft Speed: 10 MPS Rotating Pumps
2 MPS Reciprocating Pumps

Pressure: 20 BAR Rotating
40 BAR Recip.

Applications: General service packing which provides extremely low friction in centrifugal, rotary and reciprocating pump applications.

Packing Selection Guide

Though not designed to be used as the sole guide for packing selection, the following four questions can usually be used to significantly narrow the packing choices available to just a few likely options.

1. **What is the pH value of the media?**

Identify the pH value of the media. ID suitable packing in the pH Packing Selection Guide (p. 15)

2. **What is the application temperature?**

Identify the temperature of the application media. Refer to the Packing Selection Table on page 16.

3. **What is the velocity of the rotating shaft?**

Use the RPM / MPS Conversion Table (below) to convert pump RPM to velocity in metres per second. Return to the Packing Selection Table and identify the packings that remain (after steps 1 & 2) that meet the velocity requirements.

4. **What is the pressure of the stuffing box?**

Determine the pressure of the stuffing box. If not known, use two-thirds of the pump discharge pressure. Again, check pressures against those listed in the Packing Selection Table (p. 16).

If there is more than one possible choice remaining, consult the individual grade descriptions in this brochure. If more information is required please contact your local AG branch.

Revolutions per Minute (RPM) / Metres per Second (MPS) Conversion Table

RPM	Shaft Diameter in mm																
	12.7	19	25.4	31.8	38.1	44.5	50.8	63.5	76.2	88.9	102	127	152	178	203	229	254
100	0.07	0.1	0.13	0.16	0.2	0.23	0.26	0.33	0.4	0.46	0.53	0.66	0.8	0.93	1.06	1.2	1.3
300	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1	1.2	1.4	1.6	2	2.4	2.8	3.2	3.59	3.99
500	0.33	0.5	0.66	0.83	1	1.16	1.33	1.66	2	2.33	2.67	3.32	3.98	4.66	5.31	5.99	6.65
1000	0.66	1	1.33	1.66	1.99	2.33	2.66	3.32	3.99	4.65	5.34	6.65	7.95	9.3	10.6	12	13.3
1500	1	1.5	2	2.5	2.99	3.49	3.99	4.98	5.98	6.98	8	9.97	11.9	13.9	15.9	18	19.9
1750	1.16	1.75	2.33	2.91	3.49	4.08	4.65	5.8	6.98	8.14	9.34	11.6	13.9	16.3	18.6	21	23.3
2000	1.33	1.99	2.66	3.33	3.99	4.66	5.32	6.65	7.98	9.3	10.7	13.3	15.9	18.6	21.2	24	26.6
2500	1.66	2.49	3.32	4.16	4.98	5.82	6.65	8.31	9.97	11.6	13.3	16.6	19.9	23.3	26.6	30	33.2
3000	2	2.99	3.99	4.99	5.98	6.99	7.98	9.97	11.9	13.9	16	19.9	23.9	27.9	31.9	36	39.9
3500	2.33	3.48	4.65	5.82	6.98	8.15	9.3	11.6	13.9	16.3	18.7	23.3	27.8	32.6	37.2	41.9	46.5
4000	2.66	3.98	5.32	6.66	7.98	9.32	10.6	13.3	15.9	18.6	21.4	26.6	31.8	37.3	42.5	47.9	53.2
4500	3	4.47	5.98	7.49	8.97	10.5	11.9	14.9	17.9	20.9	24	29.9	35.8	41.9	47.8	53.9	59.8
5000	3.32	4.97	6.65	8.32	9.97	11.6	13.3	16.6	19.9	23.3	26.7	33.2	39.8	46.6	53.1	59.9	66.5

pH Packing Selection Guide

	Acidic														Caustic	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
344 / 344FDA / 344SC																
344BIL / 344BIL-SC / 344T																
359																
360																
4000 / 4000G																
5000 / 5000C																
5000CC / 5000-OCC																
5000T																
8000G																
8000T / 8000T-SC																
8000T-WO / 8000TLB																
8000 / 8000LC																
8100BIL																
8200BIL																
8500																
5000I / 5000IJ																
310																
320																
3030INA																
300 / 300SA																
3000T / 3000N																
3000T-K																
8000T-K / 8100BIL-K																
9907 / 9944																
895																
3000G																
8011 / 8013																
8010 / 8012																
345																
921																
921g																

This information provided in this book is of a general nature and is designed for reference purposes only.
Please consult AG to discuss suitability for any individual applications.

Marigold Packing Selection Table	Service Conditions				Motion			Acid	Alkali	Gases			Water			Oils	Solvents					
	Max Temp. (°C)	Pressure (BAR)	Shaft Speed (MPS)	pH Range	Rotary	Reciprocating	Valve Stem	Corrosive	Mild	Corrosive	Mild	Air/Dry Industrial	Bromine monochloride	Amonia	Oxygen	Steam	Water	Salt Water	Petroleum	Synthetic	Aliphatic	Aromatic
Acrylics																						
Lubricated (3000G)	260	20.7	7.6	4-10	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓		
PTFE Coated (3000N)	260	34.5	11.2	0-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
PTFE Coated & Lube (3000T)	260	34.5	12.7	0-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Aramids / Meta Aramids																						
PTFE Coated (300/300SA)	260	34.5	12.7	2-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
PTFE Coated (310)	260	20.7	10.1	1-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Carbons / Graphites																						
Carbon/PTFE & Lube (4000)	315	34.5 ³	15.2	1	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Carbon/Graphite (4000G)	455*	34.5 ³	20.3	1	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Graphite (5000)	455*	34.5 ³	20.3	1	✓	✓	✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Graphite (5000C/5000CC)	455*	34.5 ³	20.3	1	✓	✓	✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Graphite (5000-OCC)	455*	34.5 ³	24.4	1	✓	✓	✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Graphite w/ PTFE (5000T)	288	34.5	20.3	1	✓	✓	✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Graphite w/ PTFE (8000TLB)	288	20.7	21.8	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Graphite (8000G)	455*	34.5 ³	20.3	1	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Graphite (8000/8000LC)	455*	34.5 ³	20.3	1			✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Coated Carbon (8500)	455*	34.5 ³	20.3	1	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Metals																						
Aluminium (8011/8013)	538	69	10.1	4-10	✓	✓	✓		✓		✓	✓				✓	✓	✓	✓	✓	✓	✓
Copper (895)	815	69	5.1	4-10	N/A	N/A	N/A															
Lead (8010/8012)	232	69	18.3	4-10	✓	✓	✓		✓		✓	✓				✓	✓	✓	✓	✓	✓	✓
Valve Stem																						
Glass (3030INA)	455*	207	N/A	2-13	N/A	N/A	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
Graphite (5000I)	455*	310	N/A	0-14			✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Jacketed Graphite (5000IJ)	455*	448	N/A	0-14			✓	✓	✓	✓	✓	✓		✓	2	✓	✓	✓	✓	✓	✓	✓
Phenolic / Specialised																						
Kynol (320)	260	34.5	10.1	1-13	✓	✓	✓		✓		✓	✓				✓	✓	✓	✓	✓	✓	✓
Proprietary (8000T-WO)	260	124.1	15.2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Fibreglass (9907)	500	20 ³	1 ³	2-12	✓	✓	✓		✓		✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
Fibreglass (9944)	280	20 ³	2 ³	2-12	✓	✓			✓		✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
PTFE																						
Dry (344)	260	20.7	N/A	1			✓	✓	✓	✓	✓	✓	✓	✓	2	✓	✓	✓	✓	✓	✓	✓
FDA Compliant (344FDA)	260	20.7	7.6	1			✓	✓	✓	✓	✓	✓	✓	✓	2	✓	✓	✓	✓	✓	✓	✓
Lubricated (344BIL)	260	20.7	7.6	1	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
PTFE Hybrid & Lube (360)	260	20.7	15.2	1	✓	✓	N/A	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Graphite & Lube (8000T)	288	20.7 ³	21.8	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Graphite & Lube (8100BIL)	288	20.7	24.9	1	✓	✓	N/A	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Graphite & Lube (8200BIL)	288	20.7 ³	20.3	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Vegetable Fibre																						
PTFE Coated (345)	121	13.8	6.1	5-9	✓	✓	✓										✓	✓	✓	✓		
Lubricated (921/921G)	104	10	6.1	5-9	✓	✓	✓										✓	✓				
Aramid Corner Reinforced																						
Acrylic (3000T-K)	260	34.5	11.2	2-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Graphite & PTFE (8000T-K)	260	34.5	12.7	2-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Graphite & PTFE (8100BIL-K)	260	34.5	12.7	2-12	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓

* Higher in specific environments (e.g. Steam, Non-Oxidising)

² Please consult AG for appropriate oxygen certified grade.

¹ 0-14 except for strong oxidisers

³ Higher in certain applications (e.g. Valves or Specific Pumps)

Packing Accessories & Fabrication Options

Packing Extractors

Encompassing a variety of different types, sizes and styles; AG is pleased to offer a comprehensive range of packing extractor tools that allow you to remove old, used packing remnants easily and safely.

Including everything from rigid and flexible packing screws to brushes and formed hooks, our full range of packing extractor tools are available from AG as individual items or in sets, and with our large range of stock, you can be sure that AG can supply the extractor you need for the job, when you need it.

Packing Cutters

Designed to ensure the perfect skive (45°) or butt join (90°) angled cut, AG's packing cutters make the installation process easy and reduce wastage.

Using one of these tools is as simple as aligning the packing with the fence and rotating to reach alignment with the desired angle. Designed for maximum versatility, our packing cutters can be used for cutting the vast majority of our Marigold Packings (excl. 300, 300SA, 310 & 895) as well as felts and rubber sealing strips and tapes.

Marigold Soot Blower Sets

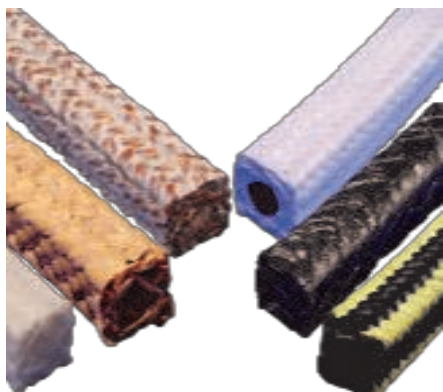
Utilised extensively within the Paper & Pulp and Power Generation industries where Recovery Boilers are in use, Marigold Soot Blower Packing Sets are fully moulded items produced to match your applications exact requirements.

Available in either Ceramic Filled, Glass Filled or Carbon Filled PTFE; Marigold Soot Blower Sets exhibit very low friction rates, good corrosion resistance and heat dissipation.

Preformed Packing Rings

All of AG's wide variety of Marigold Gland Packings can also be supplied in preformed packing rings. Manufactured in-house by our experienced team, these rings are produced to match all standard and custom shaft sizes and can greatly reduce labour costs and material wastage.

For more information on this option, or to arrange a quote for a particular size of packing ring, please contact your local AG branch.



Custom Styles, Sizes and Standards of Packing for Specialised Applications

With decades of experience in providing the correct compression packing for an application, AG understands the importance of the correct material choice. If you have a critical application that requires a more specialised packing than those listed here, please do not hesitate to contact us.



Specialised sizes, constructions and certifications have all been produced in the past and we would welcome the opportunity to work with you to create the exact packing that your individual application requires.

In addition to our ability to produce custom styles of pump and valve packing, AG is also able to offer a number of other round and square sealing ropes. These include:



Aramid Ropes

Exhibiting excellent abrasion resistance and very high mechanical strength, Aramid Rope is available from AG in a variety of different sizes. These tough, long lasting ropes are typically employed in applications with temperatures up to 340°C that are expected to see a large degree of dynamic movement.



Fibreglass Square Packing and Ropes

Used in applications with temperatures up to 500°C, Fibreglass is an excellent thermal insulation material with good mechanical properties. AG offers this quality product in an enormous range of forms which includes multiple sizes of square fibreglass packing as well as braided and twisted round ropes that are available in different densities.



Refrasil Ropes

Braided from texturised, pre-shrunk, high purity silica fibres, Refrasil Ropes are a high density insulation material used in temperatures up to 982°C. These high performance ropes resist attack from a wide variety of chemicals, exhibit good durability and are available in a variety of diameters.



Ceramic Square Packing and Ropes

Designed for use in extreme temperatures (up to 1200°C depending on the grade), AG's Ceramic Packing and Ropes are available in a variety of styles, sizes and grades. This selection includes braided packing reinforced with either fibreglass or nickel chrome as well as a vast array of twisted and braided round ropes.



Associated Gaskets



Quality
ISO 9001



For more details on any of the enormous variety of products, services and solutions offered at AG

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