plastic SUPER SADDLES



SPECIALISING IN MASS TRANSFER PRODUCTS

PALLCHEM Plastic Super Saddles are preferable to ceramic and metal because they are suitable for corrosive applications with low to moderate temperatures and are less costly.

Plastic Super Saddles are suitable for deep-pack beds and enable a high flooding point because of their inter-locking capabilities. They are less sensitive to liquid distribution quality and have a high mass transfer efficiency.

APPLICATIONS

Packing Towers in the mining, petroleum, chemical and other industries

Pulp and paper industry such as bleach plant absorbers

Environmental Protection Facilities





plastic SUPER SADDLES





UNIQUE FEATURES

Suitable for a low pressure drop system

Suitable for deep-pack beds

High free volume passages, independent of orientation

High mass transfer efficiency

Promotes highly efficient two-phase contact and distribution

Higher liquid hold-up which promotes high absorption efficiencies and high resistance time

Uninterrupted and consistent passages for gas and liquid flow

Inter-locking capabilities

Less sensitive to liquid distribution quality

Mechanically robust

MAX OPERATING TEMPERATURE

PP	GFPP	HDPE	PVDF
℃ / °F	℃/℉	°C / °F	°C / °F
104 / 220	127 / 260	100 / 212	143 / 290

PLASTIC SUPER SADDLES - DATA TABLE

PACKING SIZE mm / inch	FREE SPACE %	SPECIFIC SURFACE AREA m²/m³	BULK DENSITY kg / m
25 / 1	90	199	91
38 / 1.5	92	178	72
50 / 2	93	1105	60
76/3	96	89	50





CONTACT DETAILS

plastic SUPER SADDLES





UNIQUE FEATURES

Suitable for a low pressure drop system

Suitable for deep-pack beds

High free volume passages, independent of orientation

High mass transfer efficiency

Promotes highly efficient two-phase contact and distribution

Higher liquid hold-up which promotes high absorption efficiencies and high resistance time

Uninterrupted and consistent passages for gas and liquid flow

Inter-locking capabilities

Less sensitive to liquid distribution quality

Mechanically robust

MAX OPERATING TEMPERATURE

PP	GFPP	HDPE	PVDF
℃/℉	℃/℉	°C / °F	°C / °F
104 / 220	127 / 260	100 / 212	143 / 290

PLASTIC SUPER SADDLES - DATA TABLE

PACKING SIZE mm / inch	FREE SPACE %	SPECIFIC SURFACE AREA m²/m³	BULK DENSITY kg / m
25 / 1	90	199	91
38 / 1.5	92	178	72
50 / 2	93	1105	60
76 / 3	96	89	50





CONTACT DETAILS

BACKROUND



THE PIMMS GROUP

We are a collection of companies which function independently but have combined efforts in order to offer customers a complete turn-key solution, from industrial design and tooling through to manufacturing and product supply. All our associated companies operate out of Laser Park, Honeydew, and share a common source of control and drive. We are not only 'moulding the future' but designing the pathway through it.

PALLCHEM

Forming part of the PIMMS Group, Pallchem specialises in the manufacture and supply of plastic, steel and ceramic filtration media for mechanical, biological and chemical plants and towers. We are an innovator in the South African mass transfer industry. Our particular focus is the supply to the petrochemical and mining industries. The best part is that our products allow corporations to be environmentally responsible and protect the environment.

CONTACT DETAILS

+27(0) 11 708 4755 info@pallchem.co.za www.pallchem.co.za 1050 Liner Avenue, Corner Zeiss Road, Laser Park, Honeydew, Johannesburg, South Africa



plastic CASCADE RINGS



SPECIALISING IN MASS TRANSFER PRODUCTS

PALLCHEM Plastic Cascade Rings are preferable to steel because they are suitable for corrosive applications with low to moderate temperatures and are less costly.

Plastic Cascade Rings represent the majority of operational experience in many processes. They achieve high capacity and efficiency in deep packed beds.

APPLICATIONS

Absorption and stripping services in petrochemical and acid plants

Decarbonization and desulfurize systems

Synthetic ammonia factories and crude oil separation systems





plastic CASCADE RINGS



UNIQUE FEATURES

Smaller than a pall ring

Reduced resistance when air passes through bed layer

Increased free space

Low pressure drop

High capacity: The low flow rate resistance of the low aspect ratio rings results in a higher capacity

Good fouling resistance

Low aspect ratio of 1:3 (height of the cylinder is 1/3 of the diameter)

Open, cross linked design provides a highly efficient use of the ring's surface area

Robust to variations in liquid and vapour distribution

MAX OPERATING TEMPERATURE

₽₽	GFPP	HDPE	PVDF
°C / °F	℃/℉	°C / °F	℃/℉
104 / 220	127 / 260	100 / 212	143 / 290



PLASTIC CASCADE RINGS - DATA TABLE

PACKING SIZE mm / inch	FREE SPACE %	SPECIFIC SURFACE AREA m²/m³	BULK DENSITY kg / m
25 / 1	90	228	97.8
38 / 1.5	91	132.5	57.5
50 / 2	92.7	114.2	54.8
76 / 3.5	90	90	54.5





CONTACT DETAILS

plastic CASCADE RINGS



UNIQUE FEATURES

Smaller than a pall ring

Reduced resistance when air passes through bed layer

Increased free space

Low pressure drop

High capacity: The low flow rate resistance of the low aspect ratio rings results in a higher capacity

Good fouling resistance

Low aspect ratio of 1:3 (height of the cylinder is 1/3 of the diameter)

Open, cross linked design provides a highly efficient use of the ring's surface area

Robust to variations in liquid and vapour distribution

MAX OPERATING TEMPERATURE

₽₽	GFPP	HDPE	PVDF
°C / °F	℃/℉	°C / °F	℃/℉
104 / 220	127 / 260	100 / 212	143 / 290



PLASTIC CASCADE RINGS - DATA TABLE

PACKING SIZE mm / inch	FREE SPACE %	SPECIFIC SURFACE AREA m²/m³	BULK DENSITY kg / m
25 / 1	90	228	97.8
38 / 1.5	91	132.5	57.5
50 / 2	92.7	114.2	54.8
76 / 3.5	90	90	54.5





CONTACT DETAILS

BACKROUND



THE PIMMS GROUP

We are a collection of companies which function independently but have combined efforts in order to offer customers a complete turn-key solution, from industrial design and tooling through to manufacturing and product supply. All our associated companies operate out of Laser Park, Honeydew, and share a common source of control and drive. We are not only 'moulding the future' but designing the pathway through it.

PALLCHEM

Forming part of the PIMMS Group, Pallchem specialises in the manufacture and supply of plastic, steel and ceramic filtration media for mechanical, biological and chemical plants and towers. We are an innovator in the South African mass transfer industry. Our particular focus is the supply to the petrochemical and mining industries. The best part is that our products allow corporations to be environmentally responsible and protect the environment.

CONTACT DETAILS

+27(0) 11 708 4755 info@pallchem.co.za www.pallchem.co.za 1050 Liner Avenue, Corner Zeiss Road, Laser Park, Honeydew, Johannesburg, South Africa



plastic PALL RINGS



SPECIALISING IN MASS TRANSFER PRODUCTS

PALLCHEM Plastic Pall Rings are preferable to ceramic and metal because they are suitable for corrosive applications with low to moderate temperatures and are less costly.

Plastic Pall Rings are suitable because their cylindrical design increases the performance of the packing in terms of pressure drop, through put and efficiency. The **Pall Ring** design has an internal cross-structure of strengthened diametrical arms making it more mechanically robust for use in deep packed beds.

APPLICATIONS

Heat and mass transfer in chemical processing plants, mining and petrochemical industries

Air pollution control scrubbers for liquid/gas extraction

Water treatment in sewage plants and water supply systems





plastic PALL RINGS





UNIQUE FEATURES

Suitable for low pressure drop, high capacity applications

High degree of randomness

Consistent ratio of free and blocked passages, independent of orientation

Large surface area: volume ratio augments the rate of liquid film surface renewal to improve mass transfer

Promotes highly efficient two-phase contact and distribution

A relatively high liquid hold-up promotes high absorption efficiencies, especially where the reaction rates are slow

Uninterrupted and consistent passages for gas and liquid flow

Open, cross linked design provides a highly efficient use of the ring's surface area

Robust to variations in liquid and vapour distribution

The internal cross structure of diametrical spars makes it mechanically robust and suitable for use in deep packed beds

MAX OPERATING TEMPERATURE

PP	GFPP	HDPE	PVDF
℃ / °F	℃/℉	°C / °F	°C / °F
104 / 220	127 / 260	100 / 212	143 / 290

CONTACT DETAILS

+27(0) 11 708 4755 info@pallchem.co.za www.pallchem.co.za

PLASTIC PALL RINGS - DATA TABLE

PACKING SIZE mm / inch	FREE SPACE %	SPECIFIC SURFACE AREA m²/m³	BULK DENSITY kg / m
16 / 5.8	88	320	110
25 / 1	91	209	70
38 / 1.5	93	127	52
50 / 2	94	100	43,5
90 / 3.5	95	59	42





plastic PALL RINGS





UNIQUE FEATURES

Suitable for low pressure drop, high capacity applications

High degree of randomness

Consistent ratio of free and blocked passages, independent of orientation

Large surface area: volume ratio augments the rate of liquid film surface renewal to improve mass transfer

Promotes highly efficient two-phase contact and distribution

A relatively high liquid hold-up promotes high absorption efficiencies, especially where the reaction rates are slow

Uninterrupted and consistent passages for gas and liquid flow

Open, cross linked design provides a highly efficient use of the ring's surface area

Robust to variations in liquid and vapour distribution

The internal cross structure of diametrical spars makes it mechanically robust and suitable for use in deep packed beds

MAX	OPER	ATING	TEMPER	ATURE

PP	GFPP	HDPE	PVDF
℃ / ℉	℃/℉	°C / °F	°C / °F
104 / 220	127 / 260	100 / 212	143 / 290

CONTACT DETAILS

+27(0) 11 708 4755 info@pallchem.co.za www.pallchem.co.za

PLASTIC PALL RINGS







BACKROUND



THE PIMMS GROUP

We are a collection of companies which function independently but have combined efforts in order to offer customers a complete turn-key solution, from industrial design and tooling through to manufacturing and product supply. All our associated companies operate out of Laser Park, Honeydew, and share a common source of control and drive. We are not only 'moulding the future' but designing the pathway through it.

PALLCHEM

Forming part of the PIMMS Group, Pallchem specialises in the manufacture and supply of plastic, steel and ceramic filtration media for mechanical, biological and chemical plants and towers. We are an innovator in the South African mass transfer industry. Our particular focus is the supply to the petrochemical and mining industries. The best part is that our products allow corporations to be environmentally responsible and protect the environment.

CONTACT DETAILS

+27(0) 11 708 4755 info@pallchem.co.za www.pallchem.co.za 1050 Liner Avenue, Corner Zeiss Road, Laser Park, Honeydew, Johannesburg, South Africa

