LENNTECH
WATER TREATMENT SOLUTIONS

THERMAX

# TULSION® A-62 MP N

## PREMIUM GRADE MACROPOROUS STRONG BASE TYPE I ANION EXCHANGE RESIN

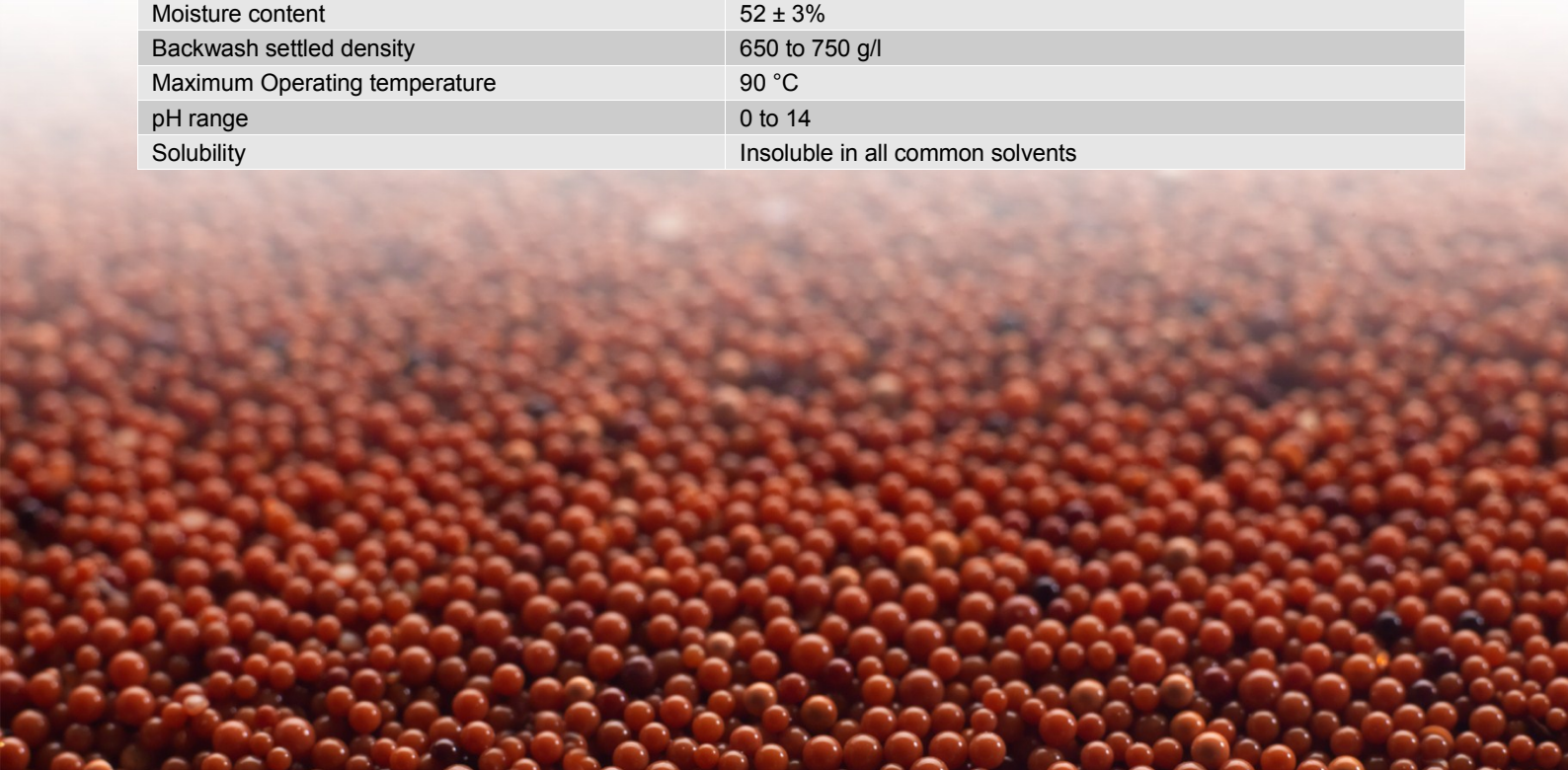
**Tulsion® A-62 MP N** is a premium grade macro-porous, Type I strong base anion exchange resin having excellent physical and chemical stability. It can be used over wide range of pH and temperature conditions. Food grade version for potable water treatment is also available.

**Tulsion® A-62 MP N** can take up nitrate from water containing other anionic impurities.

**Tulsion® A-62 MP N** is highly resistant to organic fouling.

**Tulsion® A-62 MP N** is NSF 61 certified resin, conditioned during manufacturing to achieve low VOCs, as per NSF 61 standard. However, it is recommended to follow pre-conditioning of resin before use as mentioned at the end of this literature.

| TYPICAL CHARACTERISTICS OF TULSION® A-62 MP N | |
|---|---|
| Type | Macro-porous strong base anion exchange resin |
| Matrix structure | Cross linked polystyrene |
| Functional group | Quaternary Ammonium Type I |
| Physical form | Moist spherical beads |
| Ionic form | Chloride |
| Screen size USS (wet) | 16-50 |
| Particle size (minimum. 95%) | 0.3 to 1.2 mm |
| Total exchange capacity (minimum) | 1.0 meq/ml |
| Swelling (approx.) | Cl- to OH- 21% |
| Moisture content | 52 ± 3% |
| Backwash settled density | 650 to 750 g/l |
| Maximum Operating temperature | 90 °C |
| pH range | 0 to 14 |
| Solubility | Insoluble in all common solvents |



| INFLUENT LIMITATION | |
|---|---|
| Free chlorine | Not traceable |
| Turbidity | Less than 2 NTU |
| Iron and heavy metals | Less than 0.1 ppm |

| TYPICAL OPERATING CONDITIONS OF TULSION® A-62 MP N | |
|---|---|
| Maximum operating temperature | 90 Deg. C |
| Resin bed depth minimum | 600 mm |
| service flow rate | 5- 40 BV/Hr |
| Backwash flow rate (at 77 Deg.F) | 2-4 gpm/$ft^2$ (5 to 10 $M^3$/Hr/$m^2$) |
| Regenerant | NaCl |
| Regeneration level | 100 – 250 g NaCl/lit |
| Regenerent concentration | 6 – 10 % NaCl |
| Regeneration time | 15 – 60 minutes |
| Rinse flow rate : Slow | At regeneration flow rate |
| : Fast | At service flow rate |
| Rinse volume | 30 to 75 gal/$ft^3$ (4 to 10 $m^3/m^3$) |

## PRECONDITIONING OF RESIN:

1) Load resin in the column and Carry out back wash with process water to expand resin bed at least 50%-60% for 10 minutes. Allow resin to settle and drain water from the column up to resin bed level.
2) Fill resin column with 2 BV DI water and soak it for minimum 8 hrs
3) Drain water up to resin bed level.
4) Carry out brine regeneration using 8 lb/cft NaCl as 6% solution at 2 BV/hr flow rate. Rinse with DM water until effluent is chloride free.
5) Proceed with NSF testing

## TESTING :

The sampling and testing of ion exchange resins is done as per standard testing procedures, namely ASTMD-2187 and IS-7330, 1998.

## PACKING :

| | | | |
|---|---|---|---|
| Super Sack | 1000 lit. | Super Sack | 35 cft |
| MS drums | 180 lit. | Fiber Drums | 7 cft |
| HDPE lines Bags | 25 lit. | HDPE Lined Bags | 1 cft |

For Handling, Safety and Storage requirements please refer to the individual Material Safety Data Sheets available at our offices.

The data included herein are based on test information obtained by Thermax Limited. These date are believed to be reliable, but do not imply any warranty or performance guarantee. Tolerances for characteristics are per BIS/ASTM. We recommend that the user should determine the performance of the product by testing on his own processing equipment.

In view of our constant endeavor to improve the quality of our products, we reserve the right to change their specifications without prior notice