



MS-601 MS POLYMER ADHESIVE / SEALANT



CERT.TO ASTM C920: 2014a



DESCRIPTION:

X'traseal[®] MS-601 IS BASED UPON HYBRID SILYL MODIFIED POLYETHER TECHNOLOGY. IT IS SUITABLE IN WIDE RANGE OF INDUSTRIAL APPLICATIONS AND IT HAS EXCELLENT PRIMERLESS ADHESION TO VARIOUS TYPES OF SUBSTRATES OF DISSIMILAR POROSITY AND SURFACE TEXTURES. IT ALSO CAN BE OVER PAINTED WITH MOST OF THE TYPES OF PAINTS. MS-601 IS A TECHNOLOGY THAT COMBINES THE UNIQUE SILICONE AND POLYURETHANE FEATURES OF SEALANTS. IT IS A MOISTURE CURE SYSTEM ADHESIVE SEALANT AND "NONE" BUBBLING WHEN APPLY IN HIGH HUMIDITY OR TO MOIST SUBSTRATES. IT IS NOT SUITABLE FOR STRUCTURAL GLAZING.

FEATURES:

- ♦ COMPLY TO ISO 11600, TYPE-F CLASS 20HM
- ♦ COMPLY TO ATSM C920 CLASS 25
- SIRIM QAS INTERNATIONAL MALAYSIA CERTIFIED
- ♦ HIGH MECHANICAL BONDING STRENGTH
- ♦ NON-BLEEDING AND CRACK RESISTANT
- NO VISIBLE STAIN EVEN ON POROUS SUBSTRATE
- FREE OF ISOCYANATE, SOLVENT, ACID, AND SILICONE OIL
- EXCELLENT UV RADIATION AND WEATHER RESISTANCE
- ♦ CAN BE APPLIED ON DAMP SURFACES
- ♦ ODOURLESS AND FAST CURING
- **♦** ENVIRONMENT FRIENDLY

- ♦ FUNGUS IS NOT EASILY GROW ON SEALANT
- ♦ SUITABLE FOR INDOOR AND OUTDOOR USE

USES:

MS-601 IS SPECIALLY DEVELOPED AS A UNIVERSAL SEALANT FOR SEALING BUILDING CONNECTION AND EXPANSION JOINT ON MOST BUILDING MATERIALS SUCH AS CONCRETE, BRICKWORK, ALUMINIUM, STAINLESS / MILD OR GALVANISED STEEL, DOOR OR METAL FRAMES, AND CERAMICS. IT'S ALSO SUITABLE FOR SEALING AND BONDING IN AUTOMOTIVE INDUSTRY, COLD STORAGE & CLEAN ROOM.

DUE TO A LARGE VARIETY OF DIFFERENT COATINGS AND SUBSTRATES, WE RECOMMEND PRELIMINARY COMPATIBILTY TESTS PRIOR TO APPLICATION TO ACHIEVE DESIRABLE RESULTS.

JOINT DESIGN:

THE SPECIFIED SEALANT BEAD SIZE SHOULD BE CALCULATED TO COMPLY WITH THE COMPRESSION AND EXTENSION CAPABILITIES OF THE SEALANT IN RELATION TO THE ANTICIPATED JOINT WIDTH DIE TO EXPANSION AND CONTRACTION.

MS-601 HAS A MOVEMENT ACCOMODATION FACTOR (MAF) OF 25%. THE THEORETICAL MINIMUM JOINT WIDTH MAY BE CALCULATED

$$W = \frac{M}{MAF/100} + M$$

M = EXPECTED MAXIMUM WORKING MOVEMENT OF JOINT

MAF = MOVEMENT ACCOMODATION FACTOR OF SEALANT





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A MINIMUM OF 6MM SUBSTRATE SEALANT BOND IS NECESSARY TO ENSURE ADEQUATE ADHESION AND ACCOMMODATE MOVEMENT. JOINT DEPTH SHOULD NOT LESS THAN 6MM AND NOT GREATER THAN 10MM. USE 2:1 WIDTH TO DEPTH RATIO UP TO 20MM IN WIDTH. BACKER MATERIAL SHOULD BE INSTALLED TO PREVENT 3 SIDE ADHESION AND TO CONTROL SEALANT DEPTH.

SUITABLE JOINT DEPTH VS WIDTH:

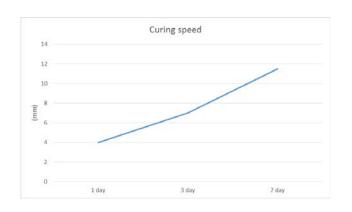
6MM X 6MM 6MM X 12MM 10MM X 20MM

APPLICATION:

- SUBSTRATES MUST BE CLEAN, DRY AND FREE FROM GREASE. REMOVE ALL DIRT, OIL, GREASE, DETERGENTS AND LOOSE MATERIAL.
- THE JOINT EDGES CAN BE MASKED WITH TAPE TO PREVENT CONTAMINATION OF ADJACENT SUBSTRATES. THE TAPE SHOULD BE REMOVED CAREFULLY AFTER TOOLING.
- CUT TIP OFF CARTRIDGE. CUT NOZZLE TO DESIRED SIZE AT 45°ANGLE. SCREW NOZZLE ONTO CARTRIDGE. PLACE CARTRIDGE INTO CAULKING GUN.
- EXTRUDE THE SEALANT FILMLY INTO JOINT TO ENSURE COMPLETE CONTACT WITH JOINT FACES.
- TOOL AS REQUIRED WITHIN THE TOOLING TIME TO ACHIEVE SMOOTH SURFACE.

CURING TIME:

MS-601 WILL SKIN FORMING IN APPROXIMATELY 15 MINUTES AND IT WILL CURE TO A DEPTH OF 11.5 MM IN 7 DAYS. LONGER CURING TIME MAY BE NECESSARY IN DRY AND LOW HUMIDITY AREA.



PAINTABILITY

MS-601 IS PAINTABLE WITH WATER BASED PAINTS, HOWEVER DUE TO LARGE NUMBER OF PAINTS AND VARNISHES AVAILABLE WE STRONGLY SUGGEST A COMPATIBILITY TEST BEFORE APPLICATION. PAINTS BASED ON ALKYD RESINS MAY HAVE EXTENDED DRYING TIME.

NOTE: MS-601 HAS LARGER MOVEMENT CAPABILITY THAN A NORMAL PAINT FILM. CRACKING OF PAINT FILM MAY OCCUR WITH MOVEMENT IN JOINT.





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CHEMICAL RESISTANCE:

GOOD RESISTANCE TO WATER, DILUTED INORGANIC ACIDS AND ALKALIS.

POOR RESISTANCE TO CONCENTRATED ACIDS AND ALKALINE SOLUTIONS, ORGANIC SOLVENTS, AND HALOGENATED HYDROCARBONS.

CLEAN UP

EXCESS SEALANT CAN BE REMOVED WITH MINERAL SPIRIT AND CLEANING SOLVENT BEFORE CURED. AFTER CURING, MS-601 MAY ONLY BE REMOVED MECHANICALLY.

LIMITATIONS:

MS-601 IS NOT SUITABLE FOR THE FOLLOWING APPLICATIONS:

- PE, PP, PTFE, PLASTICS CONTAINING SOFTENERS, AND BITUMINIOUS SUBSTRATES
- STRUCTURAL GLAZING
- TOTALLY CONFINED SPACES WHERE THERE IS NO ATMOSPHERIC HUMIDITY, WHICH IS NEEDED FOR PROPER CURING
- UNDER WATER APPLICATIONS
- HEAVY TRAFFICABLE SURFACE / JOINTS
- EXPOSURE TO AGGRESSIVE SOLVENTS OR CHEMICALS
- FOOD CONTACT

PACKAGING:

290 ML CARTRIDGES / 24 PER CARTON 600 ML SAUSAGES / 20 PER CARTON

COLOUR:

WHITE, GREY AND BLACK, OTHER COLOURS UPON REQUEST.

SHELF LIFE:

9 MONTHS FOR CARTRIDGE PACKAGING & 12 MONTHS FOR SAUSAGE PACKAGING (UNOPENED) IN A COOL AND DRY STORAGE PLACE AT TEMPERATURES BETWEEN +5°C AND +30°C.

QUANTITY ESTIMATION

NUMBER OF 600ML SAUSAGE

 $= \frac{\textit{JOINT WIDTH (MM) X JOINT DEPTH (MM) X JOINT LENGTH (M) X 1.15}}{\textit{COO}}$

NUMBER OF 290ML CARTRIDGE

 $= \frac{JOINT\ WIDTH\ (MM)\ X\ JOINT\ DEPTH\ (MM)\ X\ JOINT\ LENGTH\ (M)\ X\ 1.15}{290}$

* WITH 15% WASTAGE ESTIMATION





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SIRIM
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CERT.NO : PC004057

SPECIFICATION:

| PROPERTIES | RESULT | METHOD |
|---------------|----------------------|----------|
| CURING SYSTEM | NEUTRAL | - |
| APPEARANCE | NON-SAGGING PASTE | VISUAL |
| SMELL | ALMOST ODOURLESS | VISUAL |
| SLUMP / FLOW | 0 (NO FAILURE) | ISO 7390 |
| (VERTICAL AND | | |
| HORIZONTAL @ | | |
| 5°C AND 50°C | | |
| SPECIFIC | 1.43 +/- 0.02 | ASTM D |
| GRAVITY | (WHITE & GREY) | 1475 |
| | 1.39+/- 0.02 (BLACK) | |
| HARDNESS | 32 APPROX. | ASTM |
| (SHORE A) | | D2240 |
| STAINING AND | NO STAINING AND NO | ASTM |
| COLOUR | COLOUR CHANGE | C510 |
| CHANGE | | |
| ELONGATION AT | 1000 % APPROX. | ASTM |
| BREAK | | D412 |
| TENSILE AT | 1.40 MPA | ASTM |
| BREAK | | D412 |
| SECANT | 0.40 MPA | ASTM |
| MODULUS @ | | D412 |
| 23°C AT 100% | | |
| ELONGATION | | |
| LAP SHEAR | 1.06 MPA | ASTM |
| STRENGTH | | C961 |
| (AL. TO AL.) | 500 70 4000 | |
| APPLICATION | 5°C TO 40°C | - |
| TEMPERATURE | 1000 70 0000 | |
| SERVICE | -40°C TO 90°C | - |
| TEMPERATURE | | |

CAUTION:

READ AND UNDERSTAND SAFETY DATA SHEET OF THIS PRODUCT BEFORE HANDLING OR USING. THESE ARE AVAILABLE ON REQUEST AND VIA THE X'TRASEAL WEBSITE.

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