



## DKL Grade M, 45/55 Sn/Pb Solder Alloy

### DESCRIPTION

DKL Grade M, 45/55 Solder Alloy is a high quality, tin lead soldering alloy with a medium plastic range. It is suitable for soldering all common metals including mild steels, coppers, brasses and bronze alloys. It's relatively low melting point allows it to be used at temperatures where damage to heat sensitive components could be experienced. It has often been used in the electrical and metal working industries.

DKL Grade M Solder is classified as ISO 9453:2020(E) Alloy 113 Pb55Sn45, previously BS219 Grade M.

### CHEMICAL PROPERTIES

|                    |     |
|--------------------|-----|
| Tin (Sn)           | 45% |
| Lead (Pb)          | 55% |
| All % are nominal. |     |

### PHYSICAL PROPERTIES

|                           |                                |
|---------------------------|--------------------------------|
| Ultimate Tensile Strength | 5.67 kg/mm <sup>2</sup> @ 21°C |
| Shear Strength (steel)    | 4.09 kg/mm <sup>2</sup>        |
| Density                   | 8.94 g/cm <sup>3</sup>         |
| Solidus                   | 183°C                          |
| Liquidus                  | 215°C                          |

### APPLICATION

DKL Grade M solder can be used with DKL Activated Fluxes for sheet metal work. When used in electrical applications use Alcohol Resin paste flux which is suitable for soldering brass, copper and tinned surfaces. A large soldering iron or indirect flame heating should be used for making solder joints. Active Flux residues should be removed after soldering. Alcohol Resin fluxes are non-corrosive and need not be removed.

### AVAILABILITY

DKL Grade M Solder is available in Blowpipe Strips (approx. 85g) Tinmans Sticks (approx. 250gm), 1 kg Bars and solid solder wire in various sizes.

### HEALTH AND SAFETY

Eye and skin protection should be worn when handling and using this material. Avoid breathing fumes that may be evolved during use. Ensure adequate extraction is provided in the workspace. For more detailed information consult the Material Safety Data Sheet (MSDS) which is available on request.

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