

# LOCTITE 362

March 2016

**PRODUCT DESCRIPTION**

LOCTITE 362 provides the following product characteristics:

<b>Technology</b>	Solid flux
<b>Application</b>	Solder flux

**FEATURES AND BENEFITS**

- Good wetting on most common surfaces
- Formulated for general work
- Non-corrosive
- Fast soldering
- Rosin based
- Halide activated

**TYPICAL PROPERTIES****ALLOYS:**

The alloys used in LOCTITE 362 cored solder wires conform to the purity requirements of the common national and international standards. A wide range of wire diameters is available manufactured to close dimensional tolerances.

**FLUX:**

LOCTITE 362 solid flux leaves dry and non sticky residues. In use, its odor is typically that of rosin fluxes.

**FLUX PROPERTIES**

Acid Value, mg KOH/g	170
Halide Content, %	<0.5
SIR Test (without cleaning), J-STD-004	PASS
J-STD-004 classification	ROL1
EN29451-1 classification	1.1.2

**DIRECTIONS FOR USE****Soldering Iron:**

Good results should be obtained using a range of tip temperatures. However, the optimum tip temperature and heat capacity required for a hand soldering process is a function of both soldering iron design and the nature of the task and care should be exercised to avoid unnecessarily high tip temperatures for excessive times. A high tip temperature will increase any tendency to flux spitting and it may produce some residue darkening.

The soldering iron tip should be properly tinned and this may be achieved using LOCTITE cored wire. Severely contaminated soldering iron tips should first be cleaned and pre-tinned using Multicore Tip Tinner/Cleaner, then wiped on a clean, damp sponge before re-tinning with LOCTITE cored wire.

**Soldering Process:**

LOCTITE cored wires contain a careful balance of resins and activators to provide clear residues, maximum activity and high residue reliability, without cleaning in most situations. To achieve the best results from LOCTITE solder wires, recommended working practices for hand soldering should be observed as follows:

- Apply the soldering iron tip to the work surface, ensuring that it simultaneously contacts the base material and the component termination to heat both surfaces adequately. This process should only take a fraction of a second.
- Apply LOCTITE flux cored solder wire to a part of the joint surface away from the soldering iron and allow to flow sufficiently to form a sound joint fillet. This should be virtually instantaneous. Do not apply excessive solder or heat to the joint as this may result in dull, gritty fillets and excessive or darkened flux residues.
- Remove solder wire from the work piece and then remove the iron tip.

The total process will be very rapid, depending upon thermal mass, tip temperature and configuration and the solderability of the surfaces to be joined.

LOCTITE flux cored solder wires provide fast soldering on copper and brass surfaces as well as solder coated materials. Activity of the halide activated versions on nickel is also good depending on the state of oxidation of the nickel finish. The good thermal stability of Multicore fluxes means they are also well suited to soldering applications requiring high melting temperature alloys.

**Cleaning:**

LOCTITE 362 cored solder wires have been formulated to leave pale flux residues and to resist spilling and fuming.

Cleaning will not be required in most situations but if necessary this is best achieved using LOCTITE MCF 800 Cleaner (see separate technical data sheet). Other proprietary solvent or semi-aqueous processes may be suitable. Saponification may be viable but customers must ensure that the desired level of cleanliness can be achieved by their chosen system.

**Surface Insulation Resistance**

LOCTITE 362 flux pass the J-STD-004 SIR test and other elements of J-STD-004 test protocols associated with flux classification ROL1.

**Electromigration**

LOCTITE 362 passes the Bellcore GR-78-CORE Electromigration test.

**DATA RANGES**

The data contained herein may be reported as a typical value and/or a range. Values are based on actual test data and are verified on a periodic basis.

**GENERAL INFORMATION**

**For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).**

**Not for Product Specifications**

The technical information contained herein is intended for reference only. Please contact Henkel Technologies Technical Service for assistance and recommendations on specifications for this product.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

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