

ALPHA[®] 2351 SOLDERING OIL

DESCRIPTION

ALPHA 2351 is a soldering oil composed of a high quality, long lasting hydrocarbon oil and proprietary dross inhibiting additives. Used in all types of soldering equipment, it performs better, and is more stable at soldering temperatures than substitute products, such as peanut oil or palm oil.

ALPHA 2351 is well suited for still solder pots and all kinds of automatic wave solder machines, including those with oil injection systems. It reduces surface tension between the molten solder and the printed circuit boards in oil injection wave soldering equipment, and acts as a blanket to eliminate the formation of dross (solder oxide) on molten solder.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

ALPHA 2351 soldering oil retards the formation of oxide during the soldering operation. As it also reduces the surface tension between the solder and the boards, the resultant joints exhibit smooth, even flowing characteristics. It offers the advantages of reduced foaming, reduced smoking, higher flash and auto ignition temperatures than comparable products. It has the ability to absorb a large amount of contamination without changing its original physical properties. Therefore, its effectiveness can be maintained over a longer period of time. The exact method of introducing the oil into the soldering equipment should conform to the recommendations of the equipment manufacturer.

During production soldering, the material should be periodically examined and when signs of deterioration appear, such as heavy discoloration and charring (prior to actual dross formation on the bath), the oil supply should be emptied and replenished. ALPHA 2351 is completely compatible with all Alpha rosin based fluxes and protective coatings.

APPLICATION GUIDELINES

Cleaning: ALPHA 2351 can be readily removed from P.C. boards and assemblies with the same chlorinated or fluorinated solvents normally employed to remove rosin flux residues. ALPHA 564 and ALPHA 1001 Cleaning Solvents are recommended for this cleaning operation. Ordinary maintenance procedures are adequate for cleaning soldering equipment in which the oil has been used. ALPHA 2351 will not cause plating-out or coating of the internal workings of any equipment, nor will it cause excessive varnish build-up on pump impellers.

TECHNICAL DATA

Category	Results
Physical Properties	
Specific Gravity @ 25 °C (77 °F)	.890 +/- .01
Pour Point	10 °F
Pounds per Gallon	7.40
Flash Point (Cleveland Open Cup)	540 °F
Fire Point (Cleveland Open Cup)	610 °F
Auto Ignition Point*	800 °F
Acid Number	6.2

* The soldering temperature should not be allowed to exceed the auto ignition temperature of the oil.

AVAILABILITY

ALPHA 2351 is packaged in 5 and 54 Gallon containers.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacDermidAlpha.com/assembly-solutions/knowledge-base**

STORAGE

ALPHA 2351 will not separate and unopened containers may be stored indefinitely. However, once the oil has been exposed, it should be stored in a room temperature, low humidity environment to eliminate any possibility of condensation forming inside the container.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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