# PRODUCT DATA SHEET FC-WS-HT-A1

## Flip-Chip Flux

#### Introduction

**FC-WS-HT-A1** is a water-washable, halide-free, sprayable liquid flux designed for Sn/Pb and Pb-free wafer level solder bump formation. It can be used in a nitrogen atmosphere.

**FC-WS-HT-A1** is relatively low in viscosity to accommodate spraying and spin coating.

#### **Features**

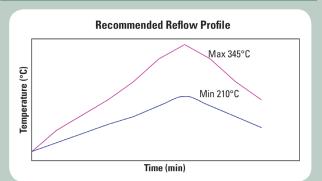
- Sprayable and dispensable
- · Excellent wetting ability
- Wide reflow temperature ranges

## **Properties**

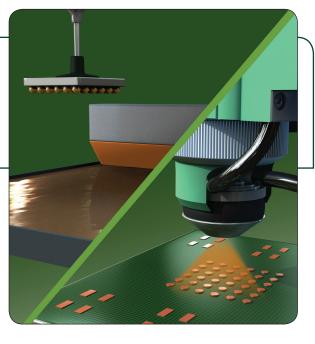
Typical Viscosity	5 centistokes (cst)
Acid Number (Typical)	11
Flash Point	23°C
Reflow Atmosphere	Nitrogen
Max Reflow Temperature	345°C
SIR	Pass
Cleaning	Deionized (DI) water @ 40psi and 55°C

#### Reflow

#### **Recommended Profile:**



This is the standard reflow profile for **FC-WS-HT-A1**. The time to peak should be about 3 to 5 minutes. The peak temperature should be 20°C more than the melting point of the metal. Time above liquidus should be about 40 to 70 seconds.



### **Packaging**

- 1 US gallon (3.75 liters) bottle
- 1 US pint (0.473 liter) plastic bottle
- 1 oz. (29.57 milliliters) bottle

## **Storage and Handling**

The shelf life of **FC-WS-HT-A1** is 6 months when stored at  $0-30^{\circ}\text{C}$ .

Flux should be allowed to reach ambient working temperature prior to use. Bottles should be labeled with date and time of opening.

## **Technical Support**

Indium Corporation's internationally experienced Technical Support Engineers provide in-depth technical assistance to our customers and rapid response to all technical inquiries.

## **Safety Data Sheets**

The SDS for this product can be found online at http://www.indium.com/sds

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## From One Engineer To Another

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