

## PRODUCT DATA SHEET

### **CERALOY TiB 5:1 (9.5 MM COIL)**

#### **GENERAL DESCRIPTION:**

CERALOY TiB-5:1 (9.5 MM COIL) is a grain refiner for Al-Si hypo-eutectic and eutectic alloys. CERALOY TiB (9.5 MM COIL) is recommended for grain refining aluminium alloys. It is available in Coil form of weight approximate 200 Kg  $\pm$ 20 Kg.

#### **PURPOSE:**

Generally aluminium and its alloys solidify in heterogeneous manner to give coarse dendritic structure. Coarse grain structure imposes problems like poor mechanical properties, poor feeding characteristics, and gives poor response to surface and heat treatment processes.

CERALOY-TiB is recommended to overcome many of the above problems. Being metallic in nature, CERALOY-TiB dissolves readily in aluminium alloys and thus gives more consistent results as compared to salt-based grain refiners. It has superior fade resistance and hence retains the refinement effect over a much longer period of time. Use of CERALOY-TiB is far more environment friendly than the conventional salt based refiners. Since no chemical reaction is involved, crucible life can be improved.

#### **ADVANTAGES:**

**CASTING WITH IMPROVED AND CONSISTENT MECHANICAL AND METALLURGICAL PROPERTIES:** - CERALOY improves as –cast mechanical properties such as tensile strength and Hardness of the castings.

**BETTER MACHINABILITY:** - The refined metallurgical structure of Alpha Phase gives better machinability and improved surface Finish of coating.

**ENVIRONMENTAL CLEANLINESS:** - Use of CERALOY gives cleaner working environment since no chemical reaction is involved.

---

#### **CERAFLUX INDIA PVT. LTD.**

F-59 & 60, M.I.D.C. Gokul Shirgaon, Kolhapur – 416234, Maharashtra (India)

Phone: +91 8380099227 | Email: [marketing@ceraflux.com](mailto:marketing@ceraflux.com)

[www.ceraflux.com](http://www.ceraflux.com)

## PRODUCT DATA SHEET

### INSTRUCTIONS FOR USE:

Prepare the desired alloy composition. Follow the normal fluxing and cleansing procedure recommended by using suitable flux from CERAFLUX range. Degas the melt with degassing tablet by using suitable grade from CERAFLUX range and dross off using small quantity of CERAFLUX-11. After the degassing operation, add CERALOY-TiB and rabble it to ensure homogeneity of the composition.

<u>ALLOY</u>	<u>% Ti</u>	<u>%B</u>	<u>%Si</u>	<u>% Fe %</u>	<u>OTHER</u>	<u>ALUMINUM</u>
TiB-5:1	4.5-5.5	0.8-1.2	0.2 max	0.3% max	< 0.05% each	Remainder

**Mean Particle Size of TiAl3 :25.5 Micron**

**Mean Particle Size of TiB2 : 1.66 Micron**

**APPLICATION RATE:** 0.1-0.2% of CERALOY –TiB 5:1

**PACKING:** CERALOY-TiB-5:1 (9.5 mm coil) is available in Bundles.

Each cast coil weights approx.200 Kg  $\pm$ 20 Kg and 9.5 +/- 0.5 mm rod approx.

\*Will be supplied as per the requirement of customer

**Note:** Addition level can vary depending on the casting process, alloy composition, section thickness and solidification rate of the casting.

---

### **CERAFLUX INDIA PVT. LTD.**

F-59 & 60, M.I.D.C. Gokul Shirgaon, Kolhapur – 416234, Maharashtra (India)

Phone: +91 8380099227 | Email: marketing@ceraflux.com

www.ceraflux.com