# ECOFREC<sup>™</sup> DD6





# **NO-CLEAN LOW RESIDUE ROSIN FLUX**

# **FEATURES**

**ECOFREC<sup>™</sup> DD6** is a low residue, rosin flux with halogen-free organic activators.

After soldering, flux residues left on the PCB are non aggressive and not liable to cause corrosion.

Electrical insulation performances are especially high when the boards are exposed to extreme accelerated ageing conditions.

**ECOFREC<sup>™</sup> DD6** flux is ideally suited to single or double-wave soldering of conventional components or SMDs.

Besides, in PCB rework operations, **ECOFREC<sup>™</sup> DD6**, when locally applied on connections with a brush or by spraying, enables to easily replace failing components using mini-wave, hot air or thermode.

### **SPECIFICATIONS**

Bulk density at 20°C	0.825
Flash point	16°C
Dry extract (3 h at 105°C)	6 %
Acid index (mg KOH/g)	32
Halogen content	no halogen
Classification according to J-STD-004	ROL0

# **CHARACTERISTICS**

#### Surface Insulation Resistance, IPC SF 818-B25

Profile	Low 90°C* / 120°C**		Medium 100°C* / 130°C**		High 130°C* / 160°C**		Control boards medium
Flux amount applied on board (g/m <sup>2</sup> )	50	100	50	100	50	100	0
SIR(Ω) at T0 20°C - 6,5% RH	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>
T0 40°C - 9,3% RH	4.10 <sup>9</sup>	0,5.10 <sup>9</sup>	7,5.10 <sup>10</sup>	1.10 <sup>9</sup>	1,8.10 <sup>10</sup>	1,1.10 <sup>10</sup>	3,5.10 <sup>9</sup>
T 7D - 93% RH - 5 V	1.10 <sup>10</sup>	3,5.10 <sup>9</sup>	7,5.10 <sup>10</sup>	4.10 <sup>9</sup>	2,3.10 <sup>10</sup>	2,7.10 <sup>10</sup>	3.10 <sup>10</sup>
T 21D - 40°C - 93% RH - 5V	1,3.10 <sup>10</sup>	7.10 <sup>9</sup>	6,5.10 <sup>10</sup>	7.10 <sup>9</sup>	3,8.10 <sup>10</sup>	1,7.10 <sup>10</sup>	5.10 <sup>10</sup>
T 28D - 40°C - 93% RH - 5V	2,5.10 <sup>10</sup>	1,1.1010	9.10 <sup>10</sup>	1.10 <sup>10</sup>	7,2.10 <sup>10</sup>	1,9.10 <sup>10</sup>	9.10 <sup>10</sup>
T 28D - 20°C - 65% RH	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>	> 10 <sup>12</sup>
T 28D - 85°C - 85% RH - 50V	3.10 <sup>9</sup>	2.10 <sup>9</sup>	7.10 <sup>9</sup>	5.10 <sup>9</sup>	2.10 <sup>10</sup>	9.10 <sup>9</sup>	4.10 <sup>10</sup>

\* Topside board preheat temperature.

\*\* Topside board temperature after wave soldering

#### PACKAGING

Plastic drum	20 L
Pen	10 cc

# **STORAGE & SHELF LIFE**

Store in a cool and properly ventilated area (between 5° and 30°C) and keep the containers tightly closed. Shelf life is 18 months.

#### **PROCESS PARAMETERS**

**ECOFREC<sup>™</sup> DD6** can be applied in foam or by spraying. We recommend the use of an air knife in order to achieve an homogeneous spreading of flux on PCB surface and to eliminate flux in excess from it. A preheat step enables to eliminate solvents by evaporation and to make metal surface deoxidising easier. The temperature at wave entrance must be of 100-120°C on top of PCB, i.e. 120-140°C under it. During use, the density should be adjusted at regular intervals by adding N°1 THINNER. In order to ensure consistent performances, it is recommended to entirely renew the flux after 40 hours work.

#### **HSE**

**ECOFREC<sup>™</sup> DD6** should be handled and used in a properly ventilated area away from any flame. Fumes should also be extracted from the fluxing and soldering areas by means of an efficient exhaust system.

Use in well-ventilated areas. Safety glasses and gloves should always be worn when handling the flux. No issues when used as recommended.

Please refer to Material Safety Data Sheet before use.

INVENTEC Material Safety Data sheets can be found at www.quickfds.com

Although the conformity to ROHS 2015/863/UE applies to EQUIPMENT put on the market and not a component in particular, we warranty that this product does not contains in quantities exceeding less than 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and less than 0.01% of Cd, in accordance with the decision of The European Commission, fixing the maximal concentration values.

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