**Laboratory for Chemical Production in Electronic Industry**

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| **Technical Data Sheet** | **MTL408** |
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| **Product name:** | **MARMOT® Flux MTL408** |

**Description and key properties:**

- **Upgraded version of commercially successful flux**
- **Non aggressive Electro-insulation Organic flux based on refined natural resin with high reduction effect**
- **Activated by unique MARMOT® patented combination of hydro-halide and inhibitor of corrosion**
- **For hand and automated soft soldering in electronics with solder Sn60-63%Pb**
- **For soldering high-end electronics even highly oxidized color metals**
- **Application, where is the need of higher content of highly activated flux**
- **This flux reaches enormous Spread Factor 94%**
- **It is mainly appointed as a filling of the cored wire solder**
- **The flux is not suitable for soldering by naked flame – it is flammable**

**Operating manual:**
It is exclusively filled into the standard Tin Lead multicored wire solders MARMOT®

| **Technical specification:** | **Corresponds to norm:** | | **Classification:** |
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| | EN 29454-1 | | 1.1.2.B |
| **Fully complies EU directive - RoHS** | DIN | | F-SW-26 |
| | J-STD | | ROL1 |
| Form | Solid | | |
| Aroma | Odorless | | |
| Density | | 0,98 + - 0,05 | kg/dm3 |
| Melting point | | 90 - 140 | C |
| Boiling point | | - | C |
| Color | Nažloutlé až nahnědlé | | |
| Spread factor – USA methodology MIL-F-14256D | | 92-94 | % |
| Spread areal – EU methodology | | | mm2 |
| Absolute corrosive effect on Cu mirror | Without depletion Cu 4000 Angstrom | | |
| - EN 29455-5 (ISO 9455-5:1992) | Without corrosion - Complies excellent | | |
| - USA method MIL-F-14256D: | Without corrosion - Complies excellent | | |
| corrosive effect tropical humidity 21 days | Without corrosion - Complies excellent | | |
| **Insulation resistance :** | | | |
| 5kV distance 1mm | | 250 | M ohm |
| PCB distance 1 x 1mm | | 1600 | M ohm |
| electrical breakdown distance 1mm | | > 5 | KV |
| Soluble in: | Isopropyl alcohol | 250 | g/lit. |
| | | | |
| Recommended thinner : | RMTL 64, Isopropyl alcohol, | | |
| Recommended cleaner: | Isopropyl alcohol. Fast cleaning dissolvent **OTM19t** | | |
| Used methodology conform the norm MARMOT, M01-3 for led free solders M01.1 | | | |
| Other proprieties: Solid flammable substance read safety data sheet if released | | | |
| For aviation and military devices is recommend cleaning, for other usage we recommend to test the influence of flux residues on the device, according to the aspect of device and process of production.<br>In all other application where the small residuum of the flux after soldering does not affect the product is not necessary to apply cleaning. | | | |

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| Issued: | 22.7.2008 |
| Revised | 25.01.2013 |

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| 11.0. | **Safety and health protection** |
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| 11.1. | Long lasting and repeated contact with skin can cause irritation and sensibility, therefore is necessary to avoid direct contact. In case when it is not possible exclude possibility of direct skin contact, the workers must wear suitable personal protective equipment. Work area must be ventilated. Do not drink or eat during work. Do not use naked flame. After work, hands should be washed with soap and warm water and cared with protective cream. |
| 11.2. | **First Aid** |
| | **Inhalation** – in case of excessive inhalation of flux fumes emitted during soldering, remove affected person to fresh air.<br>**Ingestion** – in case of accidental Ingestion, wash out mouth with water and give enough pure water to drink.<br>**Skin contact** – in case of skin contact, wash the place with soap and warm water.<br>**Eye contact** – in case of eye contact, flush the eyes immediately with plenty of water.<br>In case of large health damage or eyes contact, seek medical attention. |
| 11.3. | **Above mentioned precautions are recommended for health protection of the workers, obligatory measures are described in Safety Data Sheet (SDS) - if released, and do not substitute internal safety regulations of final customer.** |