

**Cold Mounting Material**

Revision: 6<sup>th</sup> of August, 2020

| PRODUCT NAME                             | ITEM NO.                         | SUPPLEMENTARY DETAILS   |
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| <b>Cold Mounting Material<br/>KEM 60</b> |                                  |   |
| <b>Powder</b>                            | 95013184<br>95013185<br>95013186 | 1 kg<br>5 kg<br>10 kg   |
| <b>Liquid</b>                            | 95013187                         | 500 ml  |
| <b>Set</b>                               | 95014004                         | Consisting of 1 kg powder, 500 ml liquid, 40 mixing cups, 40 mixing sticks, 2 dosing spoons |

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| <b>Description</b>               | Cold mounting material for embedding materialographic specimens.  |
| <b>Material</b>                  | <p>The system consists of a solid and a liquid component.</p> <p>Powder: Dicyclohexylphthalate 1-5 %, dibenzoylperoxide 1-5 %<br/>All further additives are contained in amounts below the threshold values for mandatory identification and can be considered nonhazardous additives.</p> <p>Liquid: Tetrahydrofurfuryl methacrylate &gt;30 %, hydroxypropyl methacrylate 15-30 %, dimethacrylate 5-15 %, N, N-dimethyl – p – toluidine 1-5 %, 2-hydroxyethyl methacrylate 1-5 %<br/>All further additives are contained in amounts below the threshold values for mandatory identification and can be considered nonhazardous additives.</p>  |
| <b>Properties</b>                | <p>Powder: homogeneous red powder, neutral smell</p> <p>Liquid: low viscosity, colorless liquid, ester-like smell, flash point 91 °C, reacts with strong oxidants and heavy metals.</p>   |
| <b>Application</b>               | <p>The product is a self-curing 2-component plastic for cold mounting samples. The product shows a low gap formation. It is used for the preparation of materialographic routine samples and may sometimes be applicable for the preparation of marginalized layers and coatings. Both components are mixed in the gravimetric ratio 2 (powder) : 0.9 (liquid). The components must be mixed for at least 30 s until a homogeneous suspension is obtained. After the sample is placed in the mold (POM, PTFE, PE, PP) the mounting material is cast. It is important to prevent foaming and bubble formation. A curing under enhanced pressure (up to 2.5 bar) is possible. The cured and ground sample should be of deep red color with a homogeneous surface finish.</p> <p>Curing Temperature: 95-110 °C, pot life: 3-3.5 min, curing time: 8-10 min, Hardness; 85 Shore D</p> |
| <b>Health and safety</b>         | <p>The product should be used on a well vented working place, ideally a suitable fume-cupboard is used. Inhalative exposition has to be minimized. Protective clothing, protective gloves (Butyl rubber with suitable penetration time) and tightly sealed eye protection have to be worn. In case of dermal exposition, wash thoroughly with water and soap. In the case of fire NO<sub>x</sub>, CO and VOCs are dangerous decomposition products. Self-contained respiratory devices have to be worn in this case. Water-spray, CO<sub>2</sub>, and extinguishing powders are suitable extinguishing agents. Further information regarding first aid measures and safety instructions can be taken from the products SDS.</p>   |
| <b>Environmental precautions</b> | <p>The product is classified in the water toxicity class 2. Especially the liquid has to be kept away from surface-/phreatic waters and sewage systems. Small amounts of hardened KEM 60 can be disposed alongside domestic waste. The deposition has to be conducted according to the legal regulations.</p>   |

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| <b>Storage</b> | The powder is assigned to storage class 6.1 C, while the liquid is assigned to storage class 10. (TGRS 510). Both components have to be stored in a dark, cool (3-30°C) and dry environment. The containers must be kept tightly sealed. The product should not be stored next to strong oxidants (e.g. org. peroxides, nitric acid), flammable substances (e.g. alcohols, fuels) and ignition sources (e.g. flying sparks, high temperatures). Large amounts (liquid) should be secured against antistatic charging. Further storage related information can be taken from the products SDSs. |
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