

Cold Mounting Material

Revision: 6th of August, 2020

PRODUCT NAME	ITEM NO.	SUPPLEMENTARY DETAILS
Cold Mounting Material KEM 30		
Powder	92004080 92004082 92001700 92005723	1 kg 5 kg 10 kg sample
Liquid	92004081 92004083 82002540 92005722	500 ml 1 l 2,5 l Muster
Set	92012021	Consisting of 1 kg powder, 500 ml liquid, 40 mixing cups, 40 mixing sticks, 2 dosing spoons

Description	Cold mounting material for embedding materialographic specimens. The system consists of a solid and a liquid component.
Material	<p>Powder: No hazardous substances are present in amounts that surpass the threshold values for mandatory identification.</p> <p>Liquid: Tetrahydrofurfuryl methacrylate 80-85 %, methyl methacrylate 10-15%, tetramethylene dimethacrylate 10 – 15 % All further additives are contained in amounts below the threshold values for mandatory identification and can be considered nonhazardous additives.</p>
Properties	<p>Powder: homogeneous green powder, characteristic smell</p> <p>Liquid: low viscosity, colorless liquid, characteristic acrylic smell, flash point 99 °C</p>
Application	<p>The product is a self-curing 2-component-polymer for cold mounting samples. The product shows a medium gap formation and yields prepared samples with high edge retention. It is well suited for mounting samples of low to very high hardness. It is applicable for the analysis of marginalized layers and coatings. Both components are mixed in the volumetric ratio 2 (powder) : 1 (liquid). The components have to 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 opaque/translucent green color with a homogeneous surface finish.</p> <p>Curing Temperature: 95-110 °C, pot life: 2-3 min, curing time; 10 - 12 min, Hardness; 85 Shore D</p>
Health and safety	<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 must be worn. In case of dermal exposition, wash thoroughly with water and soap. Combustion leads to the formation of CO and VOCs. Self-contained respiratory devices should be used in this case. Water-spray, extinguishing powders and CO₂ are suitable extinguishing agents. Further information regarding first aid measures and safety instructions can be taken from the products SDSs.</p>

Environmental precautions	The product is classified in the water toxicity class 1. Especially the liquid must be kept away from surface-/phreatic waters and sewage systems. Small amounts of hardened KEM 30 can be disposed alongside domestic waste. Powder und liquid are hazardous waste and have to be collected and disposed separately. In any case the disposal has to occur according to the local legislation.
Storage	The powder is assigned to storage class 11, while the liquid is assigned to storage class 3 (TGRS 510). Both components must be stored in a dry (3-30°C) and cool place. Storage must occur in tightly sealed containers. The product should not be exposed to sun light. 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 of liquid have to be secured against antistatic charging. Further storage related information can be taken from the products SDSs.