

Revision: June 22nd,2020

PRODUCT NAME	ITEM NO.	SUPPLEMENTARY DETAILS
Hot Mounting Material Duroplast black	95011993	1 kg
	95011994	5 kg
	95011995	10 kg

Description	Hot pressing compound mainly used for mounting materialographic samples.
Material	Thermosetting compound for hot mounting. The material is based on pre polymerized PF-resin and modified graphite filler. Graphite 10-15%, hexamethylenetetramine 1-5%. Further additives do not meet the criteria of mandatory identification or are non-hazardous.
Properties	Granulated: black, weak characteristic smell.
Application	Duroplast black is used for mounting samples for electrolytic polishing/etching and electron microscopy applications. The best results are obtained for materials of low to medium hardness (< 600 HV). For the application of Duroplast black a hot mounting press is needed. The sample is placed on the lower piston of the mold. A sufficient amount of Duroplast black is added. The mold is closed, and a suitable mounting program started. During the curing of the phenolic resin negligible amounts of formaldehyde, ammonia and phenol are released. Commonly no threshold values are surpassed. The cured mounting material has a homogeneous, black surface and a hardness of 89 Shore-D. Heating time: 5-8 min, Cooling time: 3-6 min, Mounting temperature: 130-190°C, mold pressure: 150-200 bar.
Health and safety	Ensure good ventilation at the workplace. During the curing reaction small amounts of formaldehyde are released. The occupational exposure limits must be adhered according to local legislation. While handling Duroplast black protective gloves (Nitrile rubber), tight sealing eye protection and suitable protective clothing must be worn. In the case of dermal exposure, the contaminated skin should be rinsed with soap and water. In the case of combustion formaldehyde, ammonia and phenol (as well as their pyrolysis products) are formed as hazardous decomposition products. In the case of combustion a self-contained respiratory device has to be worn. Water-Spray, CO ₂ and extinguishing powders are suitable extinguishing agents. Further information regarding first aid measures and safety instructions can be taken from the products SDS.
Environmental precautions	Small quantities of granulate and cured mounting material may be disposed alongside domestic waste. Larger amounts must be disposed of according to local legislation. The product is assigned to water hazard class 1 and must be kept away from phreatic-/surface waters and sewage systems.
Storage	The product is assigned to storage class 11 (TGRS 510). It should be stored dry and cool (3-30°C). the containers must be kept tightly sealed. It should not be stored next to strong oxidants (e.g. nitric, perchloric acid) and strong acids/bases. Storage with substances of the storage classes 5,2,7 and 1 are not allowed.