

Kentmere Fixed Grade Black & White Liquid Emulsion

INSTRUCTIONS FOR USE

Applications This is a light-sensitive, silver bromide emulsion, which can be applied to various supports such as glass, ceramics, art paper, fabrics, plastics etc., and photographically exposed with a pictorial or graphic subject. It must not be coated directly on to metal, because this would adversely affect the photo-chemical properties of the emulsion.

Pack contents 250 ml or 1 litre – solidified.
The solid photographic emulsion is liquefied by heating, to permit removal from the bottle and coating on to the chosen surface. The bottle must only be opened and coated under a darkroom safelight (red or OC).

Safety Precautions The Kentmere Fixed Grade Emulsion contains phenol derivatives for preservation. The product should therefore only be used in well-ventilated rooms, using appropriate PPE (personal protective equipment) such as gloves, lab coat & safety glasses.

Preparation The closed bottle of solidified emulsion is placed in a water bath with a temperature of 40°C to maximum 45°C. It takes about 45 to 60 minutes for the complete contents to be liquefied by the action of the heat. Correspondingly less time is needed for part-quantities. On no account shake the contents, because this would create air bubbles in the emulsion.

Pre-treatment of Emulsion Base If the emulsion cannot be properly coated on to the chosen base, the surface can be pre-treated. For this purpose normal household gelatine is dissolved in accordance with the instructions, and the solution is coated on to the base. When it has dried completely the Kentmere Fixed Grade emulsion is applied. This treatment is mainly necessary on highly absorbent bases. Glass, ceramics, plastic and painted surfaces should be thoroughly cleaned or degreased (with methylated spirits) before applying the emulsion.

Coating Depending on the nature of the base, 100 to 150 ml are needed per m². Apply the emulsion very evenly to the relevant surface. Make sure that the coating is free of air bubbles.

The emulsion is spread on firm surfaces such as glass, wood, ceramics etc. by tilting the base in various directions, or by brushing with a soft flat brush.

Preheating the base (with a hair dryer) to the temperature of the emulsion improves the flowing properties and even spread of the emulsion. On materials with uneven surfaces the coat is best applied by immersion.

Drying - Unprocessed After coating, keep the base horizontal. The emulsion is solid after approximately 30 minutes and slightly dry on the surface. For complete drying the coated material must be left in the dark for one to two days. Alternatively you can use a hair dryer without the heating switched on. This takes about 30 minutes.

Exposure The figures for Kentmere Gd. 2 serve as guides for exposing the Kentmere Fixed Grade Emulsion. Variations in the thickness of the coating and incomplete drying considerably impair / reduce the sensitivity!

Processing Some materials can be immersed to process. Others may require the chemicals to be brushed, dabbed on with cotton wool or applied by spray. In all cases, appropriate PPE (personal protective equipment) should be used such as gloves, lab coat and safety glasses. Chemistry should only be applied by spray after discussing this with your chemical supplier and after undertaking a suitable risk assessment.

Washing 20 to 30 minutes under running water at 10 to 20°C. Do not direct a powerful jet of water onto the emulsion (danger of damage!). The soaked emulsion is extremely sensitive to physical damage. Do not over-wash.

Drying - Processed In the atmosphere, at room temperature or with a hair dryer (heating switched off). Excess heat may melt the emulsion.

Storage and Durability The Kentmere Fixed Grade emulsion in the bottle protected from light is best kept in a refrigerator. On no account freeze the product. The contents can be used with good results within the storage period given on the bottle.
