

THE IDENTIFICATION OF TRADITIONAL BINDERS
USED ON AUSTRALIAN ABORIGINAL PAINTED OBJECTS
PRIOR TO 1970

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ABSTRACT

Many painted objects within ethnographic collections suffer from paint loss. In the past, assumptions have been made that this phenomenon was caused by a low binder concentration, although binder presence had not been investigated, confirmed or its type identified.

Simple laboratory methods which can detect the presence of binders on a painted object are outlined. They are based on tests developed for the medical industry and modified by the author for routine use in conservation. Methods presented outline procedures to identify three broad chemical groups of binders used in the manufacture of traditional Australian Aboriginal painted objects :

1. lipids (fats and/or oils) using Sudan Black B Bromination test and the Sigma GCI Triglyceride test;
2. proteins (egg and blood) using Sulphosalicylic Acid test, Sigma GCI Protein test and the GCI Heme test;
3. carbohydrates (honey and orchid juice) using the Sigma GCI Glucose test.

Close comparison was found between the reported binders used on certain object types and those identified.

Literature findings based on anthropological information on binders and pigments are summarised. They indicated that fat or

oil binders have higher binder concentrations than originally expected. Rapid lipid binder deterioration has lead to their present matte appearance. Compared to protein and carbohydrate binders, used as a paint vehicle or facilitator and/or for symbolic representation (blood), where used on a range of ceremonial objects with no long term expectancy and therefore no requirement to adhere or bind the pigment. The concept of "effective" binder concentration as opposed to low binder concentration is discussed.

Implications **of** these findings of binder presence are discussed and considerations for preservation and conservation treatments, which involve consolidation are outlined.

**THE IDENTIFICATION OF TRADITIONAL BINDERS USED ON AUSTRALIAN
ABORIGINAL PAINTED OBJECTS PRIOR TO 1970**

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