

INFORMATION SHEET Prerequisites for a Coating Material (powder lacquer and liquid lacquer)

A coating material licensed by GSB must fulfil the following prerequisites:

General:

All coating materials must conform strictly to the quality regulations set out in GSB AL 631.

- 1. All coating materials (formulations) have to be based on the same chemistry as the binder (type of resin and hardener as well as cross-linking ratio). As the binder is the largest constituent of a coating material and has a defining influence on the properties of the coating, it should be used to ensure greatest possible product reliability and avoid potential problems with bonding.
- 2. The selection, optimization and, if necessary, modification of additives as well as the pigments in a formulation are the responsibility of the manufacturer. Modifications are not regarded as changes from a material licence point of view. A new licence is therefore not required.
- **3.** GSB-licensed coating materials are classified as follows depending on their weathering behaviour defined in accordance with GSB AL 631:

Standard Quality	300 MJ total UV radiation (approx. one year	Florida weathering),
	50% residual gloss	
Master Quality	840 MJ total UV-radiation (approx. three years	Florida weathering),
	50% residual gloss	/
Premium Quality	1,400 MJ total UV-radiation (approx. five years	Florida weathering),
	50% residual gloss	
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It is the responsibility of the manufacturer to ensure that all coating materials supplied within the scope of a material licence fulfil the weathering resistance criteria in a Florida test in accordance with GSB AL 631.

As is generally known, the material licence simply means that the suitability of a coating material has been tested and confirmed.

- 4. An application for a material licence can only be submitted for coating materials that would not have to be marked with a "T" symbol in accordance with the EU Dangerous Substances Directives. Formulations that contain TGIC, lead, chromium or cadmium are not permitted.
- 5. For a material licence, the manufacturer can limit the colour range in advance as follows:

a) Only specific colours to be defined by the manufacturer are licensed. In this case, the manufacturer can also exclude colours from the licence, for example where the pigments needed to achieve a colour do not have the necessary resistance in Florida weathering.

- b) Only plain colours are licensed
- c) Only metallics / special-effect lacquers are licensed
- d) All colours including metallics are licensed.

These limitations are an inseparable element of the material licence and have to be stipulated in the current product information sheets.



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6. The surface finish is a characteristic of every material licence and thus applies to every product covered by a licence. Marketing more than one surface finish under a single material licence is not permitted.

- There are: - smooth or - textured surfaces.
- 7. The stipulated gloss range is binding for all products covered by the respective material licence. Measurement is carried out using a reflectometer with a radiation angle of 60° as per GSB AL 631. It is the responsibility of the material manufacturer to ensure that all products of a licensed coating material result in reflectometer values that are within the specified tolerance ranges in accordance with GSB AL 631, especially under the processing conditions specified in the information sheet. Measurement of the reflectometer value is not envisaged for coating materials with a textured finish. Evaluation is carried out visually by comparison with a master sample.
- 8. The curing conditions stated and specified in the material licence are compulsory processing parameters for all products. One has to ensure that all chemical and mechanical properties specified for the coating material can be achieved for all curing conditions specified in the registration form in accordance with GSB AL 631. The GSB administrative office must be informed of any change in curing conditions once the material licence has been issued. Each case will be raised in the GSB Technical Commission (TC). This can lead to an application for a new material licence having to be made. The curing range can be varied by feeding PA rods for certain colours. This requires informing the GSB administrative office and documentation in the product information sheet.
- **9.** At the request of the material manufacturer, a licensed coating material can be produced in different plants. A prerequisite is that the same formulation is used, which has to be confirmed in a legally binding confirmation sent to the GSB administrative office. Negative GSB inspections mean a complete ban for all production facilities.
- 10. Multi-layer structures are not tested and licensed by GSB at all. This does not exclude the use of multi-layer structures. It is the responsibility of the manufacturer and processor to ensure that the lacquer has the necessary technical properties, such as adhesion of the intermediate layer and mechanical properties. The permissible layer thickness range of multi-layer systems can differ from the usual range (60-120 μm) and shall be agreed between the contracting parties individually. If multi-layered coatings are produced by combining systems with differing grades of weathering resistance, the resistance criteria of the top coat apply. In the case of transparent and semi-transparent (e.g. metallics) multi-layer structures from systems with differing grades of weathering resistance, the system with the lowest rating serves as the assessment criterion.
- **11.** The requirements given in the information sheet "Minimum Labelling Requirements for Containers for GSB-Licensed Material Systems" have to be observed.

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