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The GfKORR

GfKORR - Society for Corrosion Protection is a federation of corrosion experts from industry and academia working in all fields of corrosion science with the aim of avoiding corrosion and its negative consequences.

The work of GfKORR is devoted to the support of corrosion research and the dissemination of knowledge of corrosion protection in all relevant fields.

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The study group focuses on:

- improvement of the knowledge of the mechanisms causing functional disorder
- interdisciplinary exchange of the state of research and technology in connection with the issues addressed by the study group, in cooperation with the industry and other scientific-technological organizations,
- damage assessment and damage prevention, as well as
- the placement of competent contact points in case of acute issues.



GfKORR – Gesellschaft für Korrosionsschutz e.V.

GUIDELINES for the Application and Utilization of Protective Coating for Electronic Assemblies



**Selection, fields of application,
requirements and application
recommendations**

Fourth edition

Why the Guidelines?

These guidelines were established because of the awareness that comprehensive and elementary knowledge of the coating and its performance on electronic assemblies is compulsory. In order to achieve this, it is necessary to analyse the entire process. These guidelines shall help examine the process in practice, from the layout to the functional test of the assembly after coating.

In order to achieve optimum results with regard to the utilization of protective lacquers and protective coatings respectively, a joint discussion between producers and fitters of electronic assemblies and users of protective coatings, as well as producers of protective coatings would be welcome in order to identify the desired properties and to put to good use the necessary and possible procedural steps. Only with such round table discussions will it be possible to develop successful solutions to all types of applications. Further to such discussions it will also be possible to update and improve the present guidelines on a regular basis.

CONTENTS

Requirements for the coating of assemblies

- General requirements
- Climate impact requirements
- Regulations for protective coating

Classification of protective coatings

- Subdivision according to binding agent
- Subdivision according to solvent
- Subdivision by drying and curing mechanism
- Subdivision according to coating thickness

Film properties of protective coatings

- Mechanical properties
- Electrical properties
- Thermal properties
- Condensation
- Water absorption and water vapor permeability
- Thermal resistance
- Flexibility (modulus of elasticity) and CTE

Influence of the assembly on the protective coating

- Base material
- Component and circuit board layout
- Solder resist
- Soldering materials and soldering process
- Drying parameters
- Keeping areas clear and exposing areas

Substrate and pretreatment of protective coatings

- Requirements for the cleaning of assemblies
- Decision on cleaning
- Purity requirements
- Minimum surface purity before protective coating
- Measurement and analysis of ionic impurities
- Detection of critical impurities
- Implementation of the cleaning processes

Application methods for conformal coatings

- Subdivision of the application methods
- Application by brush
- Application by spray cans
- Application by spraying
- Application by dipping processes
- Flood method application
- Application by spray process
- Automatic and selective coating process
- Application via dispensing process
- Application via vacuum process

Handling protective coatings during processing

- Requirements for coating rooms and equipment
- Monitoring process parameters
- Contamination
- Maintenance of dipping systems
- Aging of protective coatings
- Environmental protection with regard to protective coating

Avoidance of typical errors during protective coating

- Application of too high coating thicknesses
- Double coating
- Early hermetic casing of coated circuit boards
- Avoidance of defects in the protective coating
- Typical fault patterns in the protective coating

Testing methods for protective coating

- General verification of the protective coating
- Methods for testing climate resistance
- Methods for testing coating results

Repair of coated assemblies

- Stripping of assemblies
- Soldering through of coatings
- Repair coating

Bibliography

The GfKORR - Society for Corrosion Protection and its study group „Corrosion protection in electronics and microcircuitry“ are initiators of these guidelines.

