

Sikoat™ ERC1502 Release Coating Emulsion

INTRODUCTION

Sikoat™ ERC1502 is the base emulsion for emulsion-based platinum-catalyzed silicone release coatings, composed of a vinyl-functional polymer and a crosslinker. When mixed with a specific catalyst, these coatings cure through a heat-induced addition reaction.

Using silicone emulsion (water-based) coatings release agent can achieve uniform, low coating weights. It can be used in sizepress operations. Thickeners can be added to enable emulsion coatings to be applied to porous papers. The addition of thickeners increases the viscosity, reducing penetration and preventing the emulsion film from rupturing during drying.

Sikoat™ ERC1502 emulsion-based platinum-catalyzed silicone release coatings offer excellent release properties, fast, low-temperatures curing, and no migration.

Sikoat™ ERC1502 is designed for both PSA release and bakery release applications. It should only be used with Sikoat™ ERC-2502 Catalyst Emulsion.

ADVANTAGES & FEATURES

- Low silicone coat weights
- Suitable for a wide range of substrates
- Cured coatings are non-blocking and non-migratory
- Coatings perform well with many adhesives
- Suitable for food-contact application
- Long bath life
- Good shear stability
- Low foaming

PHYSICAL PROPERTIES

Appearance	Liquid
Color	Milky
Active (%)	40
Viscosity (mm ² /s, 25°C)	200
Density (g/cm ³)	0.99

APPLICATIONS

- Release liners for PSA laminates and tapes

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- Casting papers
- Industrial release papers
- Food-grade release and packaging papers.

HOW TO USE

Sikoat™ ERC1502 contains 40% active silicone solids. Optimal curing performance is achieved with a base emulsion (Sikoat™ ERC 1502) to catalyst emulsion (Sikoat™ ERC 2502) ratio of 96:4. While increasing the catalyst ratio can enhance cure performance, it will also reduce bath life. It is recommended to test and determine the optimal ratio before application.

Bath Preparation

To prepare a Sikoat™ ERC emulsion platinum-catalyzed silicone release coating bath, follow these steps:

1. Mix water with additives: Combine the required amount of water with a thickener and/or antifoam, if needed.
2. Add the base emulsion (Sikoat™ ERC1502): Add the selected base emulsion to the water mixture and mix thoroughly, using minimal shear.
3. Incorporate catalyst emulsion (Sikoat™ ERC2502): Add the required amount of catalyst emulsion to the bath and mix thoroughly again, maintaining minimal shear throughout the process.

Bath Life

At the recommended coating to catalyst ratio, the bath life of Sikoat™ ERC emulsion, platinum-catalyzed silicone release coatings is 6 hours at 40°C, depending on the selected base polymer and catalyst.

Release Performance

Release performance is influenced by many factors.

Typical release performance:

- tesa Tape 7475 (23°C): 5 to 15 g/25mm (at a peeling speed of 0.3 m/min).

Curing

Curing depends on the formulation, substrate quality, temperature, and oven efficiency. For example:

Temperature	Substrate	Curing time
130°C	50μ PET	15 s

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PACKING

Sikoat™ ERC1502 is available in 1Kg bottle or 20Kg pail.

STORAGE

When stored at temperatures between 10°C and 30°C in the original unopened containers, Sikoat™ ERC1502 has a shelf life of 12 months from the date of production.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

LIMITATIONS

These products are neither tested nor represented as suitable for medical or pharmaceutical uses.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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