

# SHUTTEROL RAE

## TECHNICAL DATA SHEET

**WATER-DILUTABLE, READY TO USE FORM-RELEASE AGENT FOR EXCELLENT SURFACE FINISH OF CONCRETE**

### Description

SHUTTEROL RAE is a emulsion based non-toxic, non-irritant form-release agent.

It is specially formulated to give an easy and complete release of the concrete from the forms and a significantly improved quality of the concrete surface.

### Uses

For easy and stain free release of concrete moulds and formwork of all types. Particularly where wooden formwork is used and de-moulding or stripping times exceed 24 hours.

It is safe and eliminates many health and environmental risks as compared to the traditional form release agents based on mineral oils and thus can be used with the maximum confidence by the workers on the job site.

SHUTTEROL RAE has no negative effect on the properties of concrete nor will it impair the adhesion of subsequent surface treatments when applied at the recommended coverage rates.

### Advantages

- Water-resistant chemical barrier - Ensures fast, clean stripping of forms
- No residue transfer - Stain-free & less voids
- Does not harm concrete - compatible
- Alkali resistant - protects aluminium forms
- Safe for wood fibres - extends service life
- Free from Mineral oil - VOC free
- Rapid drying - immediate placement
- Suitable for high form temperatures - up to 60°C

### Characteristics

- Form : Liquid
- Form temperature : From 0°C up to 60°C
- Relative density : 0.97± 0.01 at 25°C
- Chloride ion content: < 0.2 %

### Application Instruction

**Mixing**-Stir well before use.

**New Moulds** : No preparation is normally necessary Metal moulds showing signs of rust, must be wire brushed or treated with emery cloth and burnished clean before coating.

**New timber** : If after the first application, the SHUTTEROL RAE Extra is completely absorbed into new timber or plywood, a further application should be made before filling the moulds or formwork.

**Used moulds** : Must be thoroughly clean and free from old concrete, dirt, cement laitance, old mould oil and other contaminations. Use a strong detergent for removal of oil and grease.

### Application

Apply the diluted SHUTTEROL RAE to the face of the formwork by spray, brush or cloth. Only one coat should be applied (as thinly as possible except on very absorbent new timber where two coats may be necessary for the first application only) and allow to dry.

If the formwork is not used for several days, a further coat may be applied. Only a very thin film of SHUTTEROL RAE should be applied. Excess could lead to surface dusting of the concrete.

The best results are obtained by applying with a fine mist sprayer. Where a cloth is used, it should first be soaked in the release agent and then squeezed out well before applying. This ensures the thinnest possible film. SHUTTEROL RAE is not generally recommended where demoulding is required within 24 hours, although excellent results may be obtained with shorter times.

**Drying time** : It is essential that the SHUTTEROL RAE is thoroughly dry before placing concrete.

Otherwise, being an emulsion, its performance may be impaired. In condition of high humidity drying times will be much longer than in warm dry conditions.

**Rainfall** : It is necessary to protect freshly coated formwork from rain which may dilute the emulsion before it has dried. After drying the coating will withstand an occasional lightly shower but may be affected by heavy or continuous rain. In such cases, a further coat is advised once surfaces have dried out thoroughly.

**De-moulding** : De-moulding can be carried out in the normal way and no special precautions are necessary. After de-moulding : Formwork surfaces must be thoroughly cleaned, but this is normally

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but this is normally easy due to the excellent release action.

**Before re-use :** The cleaned formwork surfaces must be recoated with SHUTTEROL RAE each time, in accordance with normal practice.

### Packaging

SHUTTEROL RAE is supplied in 230 litre drums , 20 litre and 5 litre containers.

### Coverage

The coverage rate for SHUTTEROL RAE is 15 to 30 m<sup>2</sup>/litre, when spray applied depending on smoothness and porosity of the formwork used.

Note: Progressively better results are obtained on plywood and timber moulds as they become impregnated and the operatives become accustomed to working with the release agent. SHUTTEROL RAE in general, may be used over timber moulds. etc., which has been treated with other mould oils, provided excess has been removed.

### Storage and Shelf life

SHUTTEROL RAE must be stored where temperatures do not drop below +5°C. Store under cover, out of direct sunlight and protect from extremes of temperature.

Shelf life is 12 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult our local FIRSTCHOICE SPECIALITY CHEMICALS representative.

### Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

### Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand or on FIRSTCHOICE SPECIALITY CHEMICALS web site.

### Note

All Technical Data Sheets of FIRSTCHOICE SPECIALITY CHEMICALS are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local representative.

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