

## Rhenocure® ZBEC/C

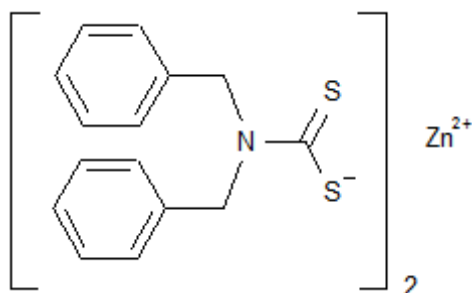
Specialty and Standard Chemicals

### Function

Rhenocure® ZBEC/C is an ultra accelerator suitable for all curing processes.

### Product description

Composition: zinc dibenzyl dithiocarbamate (ZBEC)



Appearance: white to yellowish powder, low dust  
Density: approximately 1.4 g/cm<sup>3</sup>

<u>Property</u>	<u>Nominal value</u>	<u>Unit</u>	<u>Test method</u>
Initial melting point	≥ 180.0	°C	ASTM D 1519 A
Final melting point	≤ 190.0	°C	ASTM D 1519 A
Assay	≥ 96.0	%	RUC 500
Oil content	1.5 ± 0.5	%	RUC 502
Volatile matter	≤ 0.30	%	ASTM D 4571 (15 - 23)
Sieve residue (0.063 mm)	≤ 0.30	%	ASTM D 4572

## Use

- Application:** Rhenocure® ZBEC/C is an ultra accelerator suitable for all curing processes (press, steam, hot air, LCM, CV). It can be employed as primary or secondary accelerator in NR, SBR, BR, NBR, IIR and EPDM, including solutions and latex.
- Rhenocure® ZBEC/C is usually employed as a secondary or booster accelerator similarly to the other zinc dithiocarbamates. It is chosen in preference over these to reduce the potential for formation of harmful nitrosamines. It is used both in extruded and molded goods. It is normally applied in higher dosages than the other more common zinc dithiocarbamates to compensate for its higher molecular weight.
- Processing:** Rhenocure® ZBEC/C is easily dispersed in rubber compounds. It does not decompose even at high temperature unless sulfur is present. It does, in combination with its role as a booster accelerator, shorten scorch times.
- Rhenocure® ZBEC/C does not sensitize latex compounds.
- In latex compounds Rhenocure® ZBEC/C must be incorporated in the form of a water based dispersion.
- Dosage:** Typical levels of addition based on 100 parts by weight of elastomer are:
- as secondary accelerator
- |      |           |  |
|------|-----------|--|
| NR   | 2.0 - 2.5 | sulfur   |
|      | 0.1 - 0.5 | Rhenocure® ZBEC/C                              |
|      | 0.7 - 1.3 | Vulkacit® Merkpto, sulfenamide or Vulkacit® DM |
| EPDM | 1.5       | sulfur   |
|      | 0.5 - 1.5 | Vulkacit® Merkpto                              |
|      | 0.5 - 1.5 | Rhenocure® TMTD/C                              |
|      | 0.5 - 2.5 | Rhenocure® ZBEC/C                              |
- for UHF vulcanization
- |  |     |                   |
|--|-----|-------------------|
|  | 1.2 | sulfur            |
|  | 1.4 | Vulkacit® CZ      |
|  | 1.4 | Rhenocure® D/EG-C |
|  | 1.0 | Rhenocure® ZBEC/C |
- Vulcanizate Properties:** Rhenocure® ZBEC/C gives good tensile strength and resilience when properly cured. It does not discolor or stain even when exposed to sunlight and can be used in brightly-colored rubber goods. The solubility of Rhenocure® ZBEC/C in rubber is limited. Surface blooming can occur if this solubility level is exceeded. Rhenocure® ZBEC/C does not affect the odor or taste of vulcanizates.

## Packaging

20 kg paper bag on 900 kg skid.

## Storage stability

In original closed containers under cool (approximately 25 °C) and dry conditions 730 days from date of production.

## Handling

For additional handling information on Rhenocure® ZBEC/C please consult current safety data sheet.

These raw material properties are typical and, unless specifically indicated otherwise, are not to be considered as delivery specification.

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