



TriGex (Mould Coatings)

Gibson Centri-Tech Limited have recently developed TriGex series of mould coatings for centrifugal casting of difficult-to-cast metals and alloys such as bronze, gun-metal and steel castings. Thanks to the high corrosion resistance and refractoriness which distinguish our **TriGex coatings** from competitor coatings.

TriGex A, in particular, is a highly reliable and versatile coating formulated with premium alumina and reinforced with a proprietary Activ-Gel technology enabling it to offer unsurpassed performance in achieving defect-free castings.

Why Use Gibson Centri-Tech Limited?



It's simple! We are world leaders in the design and manufacture of Centrifugal Casting Machines and Associated Equipment. We pride ourselves with our commitment to offer superior technical support to our customers to ensure customer satisfaction with our products and services. Our after-sales services are provided to our worldwide customer base in our relentless pursuit of excellence.

What are the Benefits of Using TriGex A?

- Only requires moderate re-mixing and can be diluted by up to 20 parts water to 80 parts slurry. The coating does not need soap additions at the point of use.
- Is not prone to nozzle blockage due to the benefits of Activ-Gel technology.
- Adheres well to hot moulds and develops sufficient strength to withstand erosion during mould filling under high Centrifugal force.
- Free from crystalline silica and therefore reduces the risk associated with the use of silica in die coatings .
- Viscosity and coating thickness can be varied to promote directional solidification or equiaxed crystals in the castings.
- Adheres to casting leaving the mould free for re-coating with reduced wire brushing of the mould between castings.

PROPERTIES

Colour

Off White

pH

9

SPECIFIC GRAVITY

1.65

CONSISTENCY (deg . Be)

90 deg.

SOLIDS CONTENT (wt.%)

55%

FLOW RATE (Seconds)

25 seconds (Dilution by 15 part water to 85 part slurry. Measurement of viscosity with Din 6 Viscosity Cup) .

Form Supplied

Ready—Mix (Medium Viscosity Slurry)

Instruction For Use

It is recommended that the coating is mixed with a low shear mixer prior to use. High shear mixing is not recommended. Any clear supernatant water in the coating, due to prolonged storage, is easily remixed within 2 minutes with low shear mixing.

The mould temperature should be in the range of 200 to 300°C prior to spraying with TriGex A. Use any conventional spray nozzle with diameter of 2.2 to 3.5 mm to avoid blockages. By virtue of the size of refractory and its unique shape, it is preferable to spray the coating at moderate pressure of 5 bars or lower in order to avoid dilatant response which reduces the flow rate at high pressures.

A typical dry coating thickness of 0.8 to 1.2mm should be targeted for optimum coating performance. It may be preferable to try the coating in “As Received” consistency before experimenting with further dilutions.

The coating must be maintained above freezing temperature and preferably between 20 - 60°C. At this temperature interval, variation in temperature will not have any significant impact on the spraying properties of the coating due to its formulation framework based on Activ-Gel technology.



TYPICAL DATA



Spraying Capacity Table For “As Received” TriGex A

Pressure (Bar)	Flow rate in Ltr/Min (Water)*	Flow Rate in Ltr/Min (Coating)
2	3.2	2.5
3	3.9	3.0
4	4.6	3.3
5	5.1	3.9

* AF10 Delavant nozzle

Advice On Packaging

Packaging Code	Weight	Description
TriGex A4160-R05-10-0030-P02	30 KG	30 LITRE PLASTIC DRUM
TriGex A4160-R05-10-0350-P02	350 KG	300 LITRE PLASTIC DRUM

Protect From Frost and extreme temperatures

Disclaimer

The physical properties defined in this sheet are representative of a range over which the material is supplied and do not constitute a specification.

For information on this product or any of our other products and services please contact our Sales and Technical Team:

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