

Advanced Materials

Mould Release QZ 13

High performance release agent.

The pre-treatment of moulds and models in order to ensure trouble-free de-moulding of cold or hot cured Araldite[®] Epoxy resin castings, mouldings or laminates and Arathane[®] Polyurethane systems.

Applications

Mould Release Agent QZ 13:
Brush, rag , spray gun or vaporiser.

Processing methods

Optimum release effects.
Economical.
Only slight soiling of mould.
Allows smooth de-moulding even at mould temperatures above 150 °C (Automatic Pressure Gelation process).
Enables precise reproduction of surface detail.
Short drying times.
No corrosion of Araldite[®] epoxy or metal moulds.

Properties

Product data

(guideline values)

Mould Release QZ 13	Liquid, low-viscosity, solvent-containing silicone oil.				
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	Viscosity	at 20°C	ISO 12058	mPa s	4
	Specific gravity	at 20°C	ISO 1675	g/cm ³	~ 0.86
	Flash point		DIN 53213	°C	> 25
	Solvent content		ISO 787-2	%	68 - 72*
Vapour pressure	at 20°C		mbar	~33	

* Specified range

Handling precautions Mould Release Agent QZ 13 contains flammable solvents. The usual fire precautions should be taken whenever it is stored or handled.

Storage Store the components in a dry place according to the storage conditions stated on the label in tightly sealed original containers. Under these conditions, the shelf life will correspond to the expiry date stated on the label. After this date, the product may be processed only after reanalysis. Partly emptied containers should be tightly closed immediately after use.
For information on waste disposal and hazardous products of decomposition in the event of a fire, refer to the Material Safety Data Sheets (MSDS) for these particular products.

Processing

(guideline values)

General

Mould Release Agent QZ 13 allows trouble-free de-moulding of epoxy resin castings, mouldings and laminates. A brush, rag, spray gun or vaporizer is used to apply the thinnest possible layer to the surface of moulds or models. Aerosol can application of a fine, homogeneous coating is particularly economical.

A single application of Mould Release Agent QZ 13 suffices to allow ready de-moulding of several cold or hot curing Araldite epoxy castings. Nevertheless, we recommend applying of a fresh layer after each de-moulding operation.

Detailed information on the applications and processing of Araldite casting and impregnating resin systems as well as Araldite epoxy resin systems for tooling is given in the Instruction Sheets covering the various products.

Treatment of non-porous mould materials

Mould Release Agent QZ 13 should be applied as a very thin layer to the preheated surfaces of steel or aluminium alloy moulds. Dilution is one way of simplifying this operation.

Thin layers offer several advantages:

- precise reproduction of surface details
- glossy casting surfaces when polished moulds are used
- better results at lower release agent cost
- non corrosion of mould or model surfaces by vaporized solvent
- slight or only very gradual soiling of moulds due to build-up of release agent residues.

Mould Release Agent QZ 13 has been found to give satisfactory results at mould temperatures ranging from 20°C to 180°C, and when using the pressure gelation technique.

Treatment of new or slightly porous mould materials

A pre treatment with QZ 13 has been shown to give the best results when working with moulds made of slightly porous materials such as cast aluminium. Accepted practice is to apply Mould Release Agent QZ 13 on the mould surface with a brush or cloth and stove the mould for 5-10 hours at 160-180°C. The superfluous Mould Release Agent should then be removed by polishing with a soft cloth. After this pre treatment QZ 13 the mould is ready to be used for the casting process as described above

Legal Notice

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