

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

(guideline values)

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

(quideline 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.

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 ℃ to 180 ℃, 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 ℃. 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

Huntsman Advanced Materials

(Switzerland) GmbH Klybeckstrasse 200 4057 Basel Switzerland

Tel: +41 (0)61 299 11 11 Fax: +41 (0)61 299 11 12

www.huntsman.com/advanced_materials Email:

advanced materials@huntsman.com



Huntsman Advanced Materials warrants only that its products meet the specifications agreed with the user. Specified data are analysed on a regular basis. Data which is described in this document as 'typical' or 'guideline' is not analysed on a regular basis and is given for information purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.

The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication. While all the information and recommendations in this publication are, to the best of Huntsman Advanced Material's knowledge, information and belief, accurate at the date of publication, nothing herein is to be construed as a warranty, whether express or implied, including but without limitation, as to merchantability or fitness for a particular purpose. In all cases, it is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of any product for its own particular purpose.

The behaviour of the products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which are not known to Huntsman Advanced Materials. It is the responsibility of the user to evaluate the manufacturing circumstances and the final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Advanced Materials containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent on manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

Except where explicitly agreed otherwise, the sale of products referred to in this publication is subject to the general terms and conditions of sale of Huntsman Advanced Materials LLC or of its affiliated companies including without limitation, Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., Huntsman Advanced Materials (UAE) FZE, Huntsman Advanced Materials (Guangdong) Company Limited, and Huntsman Advanced Materials (Hong Kong) Ltd.

Huntsman Advanced Materials is an international business unit of Huntsman Corporation. Huntsman Advanced Materials trades through Huntsman affiliated companies in different countries including but not limited to Huntsman Advanced Materials LLC in the USA and Huntsman Advanced Materials (Europe) BVBA in Europe.

All trademarks mentioned are either property of or licensed to Huntsman Corporation or an affiliate thereof in one or more, but not all, countries.

Copyright © 2015 Huntsman Corporation or an affiliate thereof. All rights reserved.