

PRODUCT INFORMATION

IONAC® NM 60



Ionac® NM 60 is a mixed bed ion exchange resin ready for use.

Ionac® NM 60 is a mixture of strongly acidic cation exchanger resin and strongly basic type I anion exchanger resin ready for service. The equivalent mixture ratio is 1 : 1.

The resin mixture is ready for use without regeneration. **Ionac® NM 60** is especially suitable:

- » in mixed bed units for polishing after primary demineralization systems.

It is also suitable for the demineralization of service water in small and very small units for:

- » laboratories and photo laboratories
- » household appliances (e.g. steam irons, air humidifier)
- » small industrial plants (e.g. refilling of starter batteries or coolant circuits)

The special properties of this product can only be fully utilized if the technology and process used correspond to the current state-of-the-art. Further advice in this matter can be obtained from Lanxess, Business Unit Ion Exchange Resins.

General Description

Ionic form as shipped	H ⁺ /OH ⁻
Functional group	sulfonic acid/quat. amine type I
Matrix	crosslinked polystyrene
Structure	gel type beads
Appearance	dark / light brown

Physical and Chemical Properties

		metric units	
Uniformity coefficient*		max.	1.7
Bead size*	> 90 %	mm	0.315 - 1.25
Effective size		mm	0.51 - 0.63
Bulk density	(+/- 5 %)	g/l	720
Density		approx. g/ml	1.2
Water retention		wt. %	57 - 62
Volume change	H ⁺ /OH ⁻ → Ca, Mg/Cl, SO ₄	max. vol. %	- 20
Stability	at pH-range		0 - 14
Storability	of the product	max. years	2
Storability	temperature range	°C	-20 - 40

* Specification values subjected to continuous monitoring.

Recommended Operating Conditions*

	metric units	
Operating temperature	max. °C	60
Operating pH-range		0 - 14
Bed depth	min. mm	600
Specific pressure loss (15 °C)	approx. kPa*h/m ²	1.5
Pressure loss	max. kPa	200
Linear velocity exhaustion	max. m/h	60

* The recommended operating conditions refer to the use of the product under normal operating conditions. It is based on tests in pilot plants and data obtained from industrial applications. However, additional data are needed to calculate the resin volumes required for ion exchange units. These are to be found in our Technical Information Sheets.

Additional Information & Regulations

Safety precautions

Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins.

Toxicity

The safety data sheet must be observed. It contains additional data on product description, transport, storage, handling, safety and ecology.

Disposal

In the European Community Ion exchange resins have to be disposed, according to the European waste nomenclature which can be accessed on the internet-site of the European Union.

Storage

It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions without exposure to direct sunlight. If resin should become frozen, it should not be mechanically handled and left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process.

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

Lanxess Deutschland GmbH
BU ION
D-51369 Leverkusen

www.lewatit.com
www.lanxess.com

Edition: 2006-06-12
Previous Edition: 2006-06-12