

# <sup>7</sup>Li in the Form of Lithium Hydroxide Monohydrate for the Nuclear Industry



**Enriched Lithium-7 Hydroxide Monohydrate for use as an alkalizing agent in pressurized water reactors.**

Our Lithium-7 is specifically designed to meet the quality requirements of the nuclear power industry. Two grades are available – one of them world exclusively produced for NUKEM Isotopes GmbH:

- **Grade „X“** is a material of x-tra high purity and enrichment, far exceeding the requirements of all NPP specifications.
- **Grade „B“** is a free flowing material for application in Lithium-7-resin manufacturing.

# $^7\text{LiOH} \cdot \text{H}_2\text{O}$ - Grade "B"

## Specification

### Physical and chemical properties:

- Material  $^7\text{Li}$  in the form of  $\text{LiOH} \cdot \text{H}_2\text{O}$ .
- Enrichment  $^7\text{Li} \geq 99.93\text{at}\%$
- Total  $^7\text{LiOH}$  content 48wt% - 58wt%
- Water content 42wt% - 52wt%.

## Impurities in $\mu\text{g/g}$

Cl	$\leq 100$
F	$\leq 500$
Fe	$\leq 50$
Hg	$\leq 0.5$
K	$\leq 50$
Na	$\leq 10$
Pb	$\leq 10$
$\text{PO}_4$	$\leq 500$
$\text{SiO}_2$	$\leq 500$
$\text{SO}_4$	$\leq 100$
Zn	$\leq 5$
Insolubles	$\leq 1000$

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# ${}^7\text{LiOH} \cdot \text{H}_2\text{O}$ - Grade "X"

## Specification

### Physical and chemical properties:

- Material  ${}^7\text{Li}$  in the form of  $\text{LiOH} \cdot \text{H}_2\text{O}$ .
- Enrichment  ${}^7\text{Li} \geq 99.95\text{at}\%$
- Total  ${}^7\text{LiOH}$  content 48wt% - 58wt%
- Water content 42wt% - 52wt%.

## Impurities in $\mu\text{g/g}$

Al	$\leq 5$
Ca	$\leq 10$
Cl	$\leq 20$
Cu	$\leq 1$
F	$\leq 200$
Fe	$\leq 10$
Hg	$\leq 0.05$
K	$\leq 10$
Mg	$\leq 5$
Na	$\leq 10$
Pb	$\leq 0.2$
$\text{PO}_4$	$\leq 200$
$\text{SiO}_2$	$\leq 250$
$\text{SO}_4$	$\leq 100$
Zn	$\leq 1$
Insolubles	$\leq 1000$

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