

⁷Li

Lithium 7 in the form of Lithium Hydroxide Monohydrate

Description

Lithium-7 as Hydroxide Monohydrate (${}^7\text{LiOH}\cdot\text{H}_2\text{O}$) is mainly used in the nuclear power industry as an alkalizing additive to the coolant of the primary circuit of PWR-reactors to adjust water-chemistry pH. It is also used as the main component in ion-exchange membranes in water treatment applications.

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	55 – 58 wt%
Water content	42 – 45 wt%

Impurities fraction of total mass, %?

Pb	≤ 0.001
Hg	≤ 0.00005
Cl	≤ 0.01
SO_4	≤ 0.01
Na	≤ 0.002
Fe	≤ 0.001
PO_4	≤ 0.05
Si	≤ 0.05
Zn	≤ 0.0005
Insolubles	≤ 0.1
Lithium carbonate	≤ 1.3