



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 | 7Li in the form of $\text{LiOH}\cdot\text{H}_2\text{O}$. |
| Enrichment | $7\text{Li} \geq 99.95\text{at}\%$ |
| Total 7LiOH 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 |