



## LITHIUM-7 HYDROXIDE MONOHYDRATE

Rosatom Chemical specializes in the development and production of chemical products and technologies across a wide range of fields.

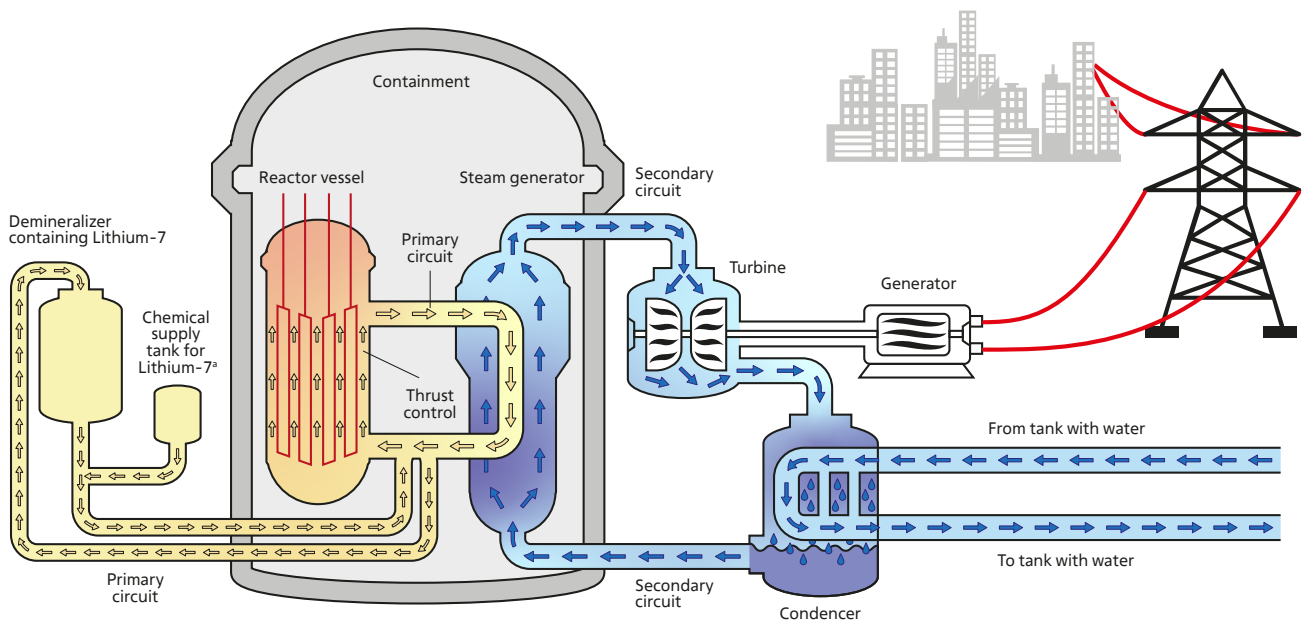
**Rosatom chemical is one of the world's major lithium-7 suppliers.**

Lithium-7 is used in nuclear power as an additive in primary coolant PWR type reactors to control water chemistry and enhance corrosion protection. It is also used in the production of reagents for nuclear power as a main component when making ion-exchange resins.

Lithium-7 hydroxide monohydrate (99.99%) is used as a component of fluoride coolant in molten salt reactors (MSRs), facilitates neutron absorption processes, in PWR reactor cooling systems and for research purposes.

### APPLICATION AREAS

Lithium-7 is used in nuclear power engineering as an additive to the primary coolant of PWR-type reactors to adjust water chemistry parameters, minimizing corrosion.





## Lithium-7 hydroxide monohydrate\*

Atom fraction of lithium-7 relative to $\Sigma$ (lithium isotopes), %	Mass fraction of lithium hydroxide $\geq$ min %	Mass fraction of impurities $\leq$ max %						
	LiOH·H <sub>2</sub> O	Pb+Hg	Cl	F	SO <sub>4</sub>	Na	Si	PO <sub>4</sub>
99,9/99,95	56	0,001	0,05	0,05	0,05	0,05	0,05	0,05

## High purity lithium-7 hydroxide monohydrate\*

Atom fraction of lithium-7 relative to $\Sigma$ (lithium isotopes), %	Mass fraction of lithium hydroxide $\geq$ min %	Mass fraction of impurities $\leq$ max %										
	LiOH·H <sub>2</sub> O	Pb	Zn	Hg	Cl	SO <sub>4</sub>	Na	F	Fe	Si	PO <sub>4</sub>	insoluble
99,99	48–58	0,001	0,0005	0,0005	0,05	0,02	0,002	0,01	0,001	0,05	0,05	0,1

\* Available for production according to customer specifications

The product is supplied as Lithium-7 hydroxide monohydrate, appearing as a fine-crystalline white, light gray, or cream-colored substance.

### PACKAGING AND SHELF LIFE

Lithium-7 hydroxide monohydrate is packed in double polyethylene bags that are sealed and then placed in a protective bag previously placed in a container. A 48 dm<sup>3</sup> polyethylene or metal barrel serves as a container.

The guaranteed shelf life is **5 years** from the date of manufacture.

