

**Table 18. Price estimate of salt coolants in 1971 (U.S. dollars)**

Coolant	Composition (%)	Melting point (°C)	Cost (\$/kg)	Cost (\$/liter)
<i>AHTR candidate coolant salts</i>				
NaF-KF-ZrF <sub>4</sub>	mol %	10-48-42	385	4.6
	wt %	4-27-69		
<sup>7</sup> LiF-NaF-KF	mol %	46-11.5-42.5	454	11.3
	wt %	29-12-59		
<sup>7</sup> LiF-NaF-BeF <sub>2</sub>	mol %	35-27-38	335	17.5
	wt %	24-46-30		
<sup>7</sup> LiF-BeF <sub>2</sub>	mol %	67-33	460	26.3
	wt %	53-47		
<i>Other industrial salts</i>				
NaNO <sub>3</sub> -NaNO <sub>2</sub> -KNO <sub>3</sub>	mol %	7-48-45	142	0.33
NaF-NaBF <sub>4</sub>	mol %	8-92	385	0.82
LiCl-KCl	mol %	59-41	355	1.12
<i>Other low-vapor pressure coolants</i>				
Pb			327	0.4
Na			98	0.88
Pb-Bi			125	7.45
Bi			271	13.2

**Table 19. Commodity Prices for Selected Materials**

Material	Commodity price <sup>a</sup> (\$/kg)	Price of contained metal \$/kg-metal	Derived fluoride price (\$/kg-fluoride)	World-wide production (ton/y)
LiF	17.00	63.54	63.54	--
Li <sub>2</sub> CO <sub>3</sub>	1.72	9.16	2.45	~50,000
BeO	100.00	610.00	117.00	--
Be-metal	770.00	770.00	147.4	--
11% BeO-ore	0.080	2.02	--	114 (Be element)
Zr-metal	30.80	30.80	16.80	--
ZrO <sub>2</sub>	8.89	11.89	6.48	--
98% ZrO <sub>2</sub> -ore Baddeleyite	3.00	4.05	2.2	21,300
NaF	1.37 <sup>b</sup>	2.56	1.32	very large

<sup>a</sup>All prices are from the USGS Minerals Yearbook except NaF. USGS prices are for 2002 except LiF (1995) and Li<sub>2</sub>CO<sub>3</sub> (2004).

<sup>b</sup>Price from *Chemical Marketing Reporter* volume 267(12) p.18.