Parameter	Value	Notes
Scientific Name	Alkaline Hydrolysis	Also known as Aquamation, Resomation, Bio-cremation
Process Temperature	80–100°C	Far below cremation's 800–1000°C
Process Pressure	~4 atm	Maintains liquid reaction conditions in sealed chamber
Solution Composition	95% water + 5% alkaline	Potassium hydroxide (KOH) or sodium hydroxide (NaOH)
Process Duration	6–8 hours	Adjusted based on size and equipment type
Bone Preservation	~90% (8–10% of body weight)	Cremation: only 1–3%
Microchip Retention	~70%	Cremation: 0% (destroyed by heat)
Carbon Emissions	~30 kg CO_2e	Cremation average: ~320 kg CO_2e per cycle
Energy Consumption	10–15% of cremation	Source: Mayo Clinic comparative study
Reaction Products	Water, amino acids, peptides, mineral salts	Sterile, non-toxic, biodegradable