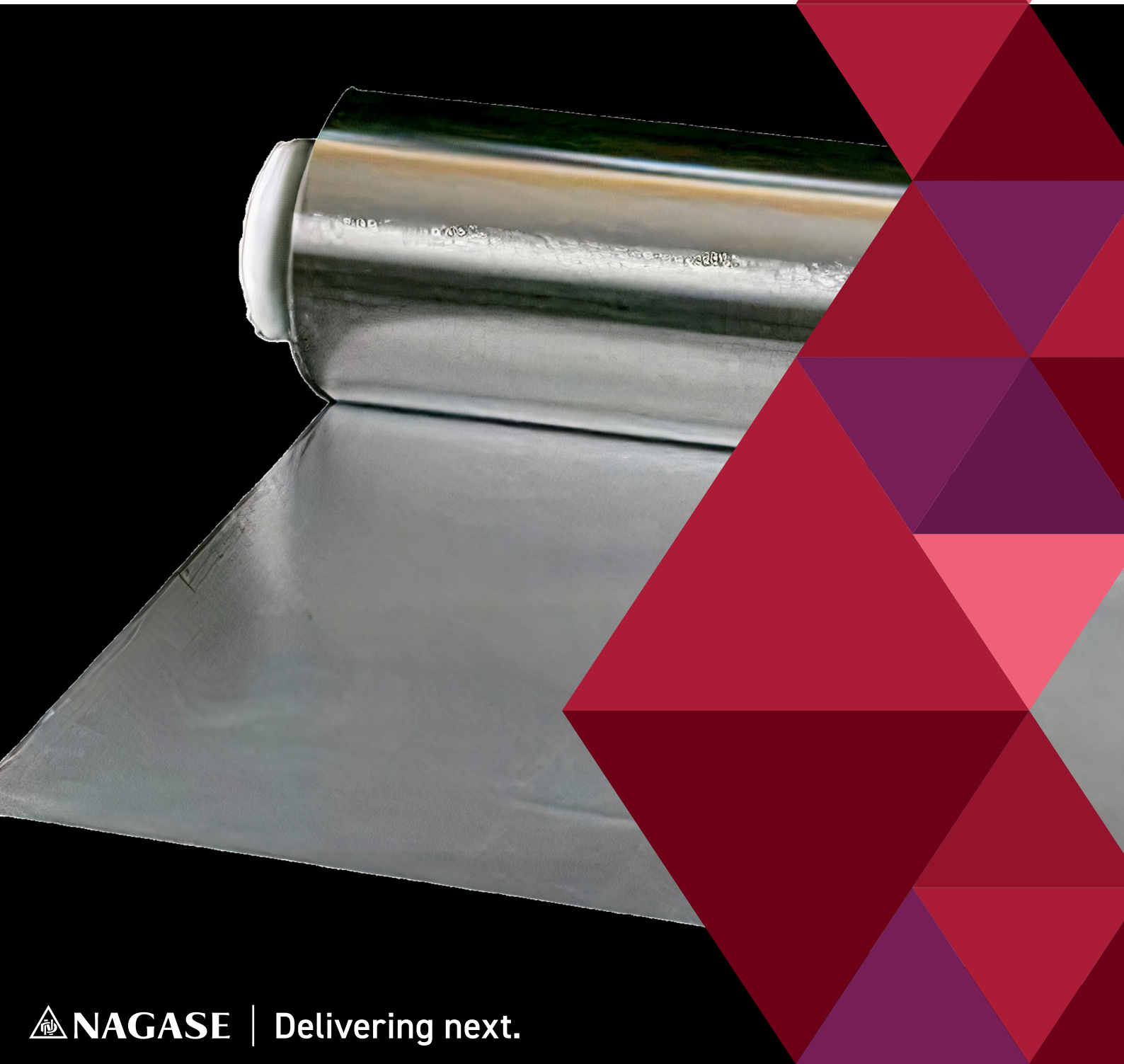
PRODUCTS FOR BATTERY

Aluminium Collector Foil



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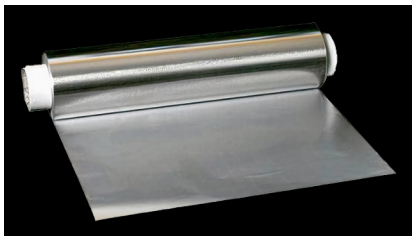
Product Description

Aluminium foil is used as cathode current collector for lithium-ion batteries



Features

- High conductivity
- High strength
- High ductility

Application

- Lithium-ion battery

Chemical Composition and Features

Alloy Designation	Alloyed	Chemical Composition [mass %]							
		Si	Fe	Cu	Mn	Mg	Zn	Ti	Al
1085	Pure aluminium series	0.10	0.12	0.03	0.02	0.02	0.03	0.02	99,85 % and over
1N30		Si+Fe ≤0.7		0.10	0.05	0.05	0.05	-	99.30 % and over
3003	Al-Mn series	0.60	0.7	0.05 - 0.20	1.0-1.5	-	0.1	-	Bal.
8021	Al-Fe series	0.15	1.2 - 1.7	0.05	-	-	-	-	Bal.

Alloy Designation	Refining		Thickness (µm)	Width (mm)	Length (M)	Winding Core Specifi-cation	Winding Core Material	Package	Coil Diameter *15 µm
1085	H18	Bright/ Bright	15,20	250-1,190	~12000	Product size + 5 mm Pitch	FRP SUS GTR Iron Paper	Wooden Box Reinforced cardboard - SUS Box	505
1N30			12,15,20	250-1,080					
3003			13,3,15	250-1,190					
8021			14,4,15	250-1,250					
		Bright/ Mat	10	520	~7000				-

Mechanical Properties & Electric Conductivity of Produced Foil

Alloy Designation	Alloyed	Thickness	Mechanical Properties			Electric Conductivitiy (%IACS)	Features
			Tensile Strength (MPa)	Proof Stress (MPa)	Elongation (%)		
1085	Pure aluminium series	15	180	165	5.0	60.1	High conductive
1N30			185	165	4.5	58.4	General-purpose products
3003	Al-Mn series		270	240	3.0	47.2	High strength
8021	Al-Fe series		190	170	5.0	57.8	High strength and high ductility

For more information please reach out to mobility@nagase.eu

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