

Technical Data Sheet

Water-permeable polymer for Controlled Release Fertilizers

-SANAGUREX-

Product Description

SANAGUREX is a solvent-free polyurethane resin designed for a controlled-release fertilizer that improves the release of active ingredients.

Product Features

(1) SANAGUREX has the typical properties and characteristics.

Table 1. Typical Properties

Inspection item	Unit	SANAGUREX A	SANAGUREX B
Appearance	-	Yellow liquid	Brown liquid
Viscosity	mPa·s/25°C	800	210
Hydroxyl Value	-	190	-
NCO Content	%	-	31.0

Table 2. Typical Characteristics

Item	Unit	Characteristics
Blend ratio (parts by weight)	-	A/B=70/30
Mixed viscosity (*1)	Pa·s	0.5
Available time (*2)	min	5
Durometer (Type D)	-	D/73/1

(*1) Viscosity after mixing a total of 100g of A and B at 25°C for 1 minute
(Ambient temperature: 25°C)

(*2) Elapsed time from the start of mixing until the viscosity reaches 10 Pa·s

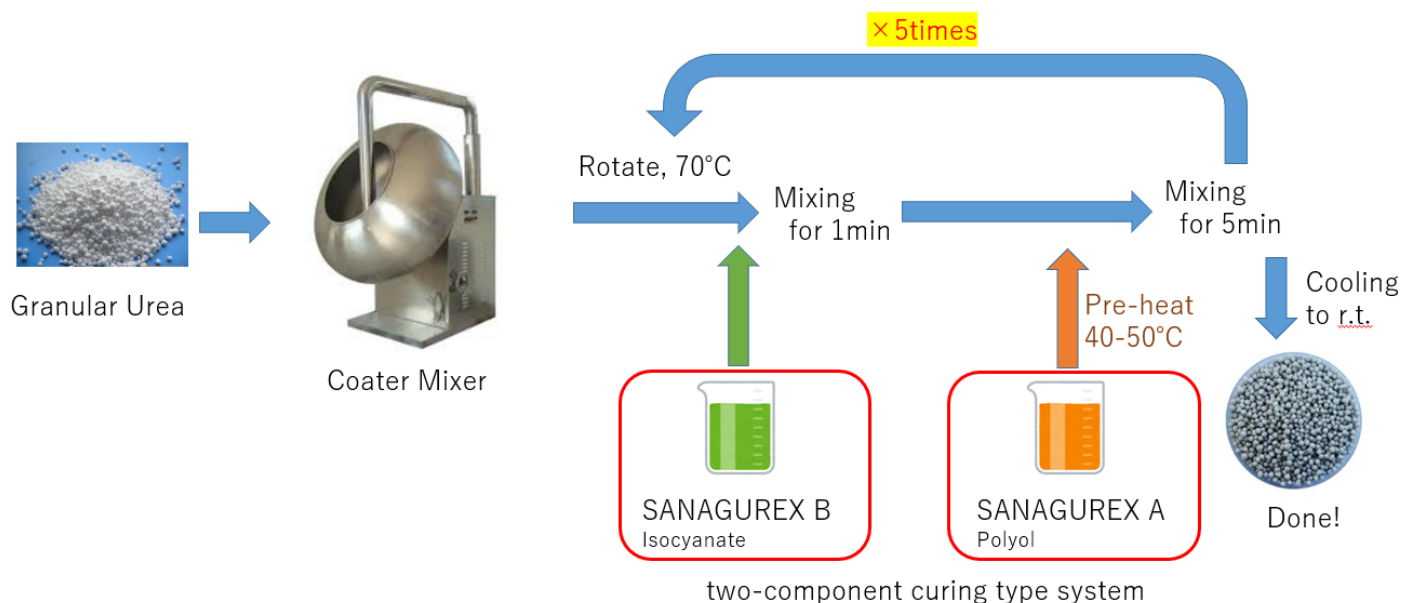
(2) SANAGUREX's factors for coating performance.

Function	Factor	Composition
Smooth surface of polymer coat	Initial viscosity of mixture	NCO/OH
	Pot life	Amount of Amine-AOA Ratio of MDI-isomer (4,4'/2,2') Distance between crosslinking points
Anti-blocking of granule	Curing time	Amount of amine-AOA
	Tg	Distance between crosslinking points Ratio of cyclic aromatic compound Concentration of urethane

<Handling properties>

Viscosity at 2 minutes after mixing : 1000mPa·s/25°C, Pot life : Approximately 5min, Curing time : 6 hours @ 25°C, Tg : 44°C

Usage examples



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