

Doronnko series : Data

■ Typical physical properties of Doronnko series

product name	appearance	moisture(%)	pH(/25℃)	BD(g/ml)	Particle Size(μm)
Doronnko No.1	gray blown powder	0.2	11.8	0.70	110
Doronnko No.3	gray powder	0.1	12.0	0.90	70
Doronnko EPX	gray blown powder	0.5	10.0	0.72	100
Doronnko NC	gray blown powder	0.1	12.0	0.93	60
Doronnko AC-2	gray blown powder	1.0	4.5	0.71	110
Doronnko NK-1	gray blown powder	1.5	8.3	0.75	60

■ The comparative table of Doronnko and usual soil improvement agent

character	product	Doronnko No.1	Doronnko EPX	Cement series	Lime series
E v a l u a t i o n	strength	△	◎	◎	◎
	safety	◎	◎	×	×
	recycling	◎	◎	×	△
	deodorization	◎	◎	×	×
	workability	○	○	○	△
	cost performances	○	○	◎	◎
	environmental load	◎	◎	×	×
	Total evaluation	◎	◎	○	×

FLOCSITE series : Data

■ The physical properties of FLOCSITE series

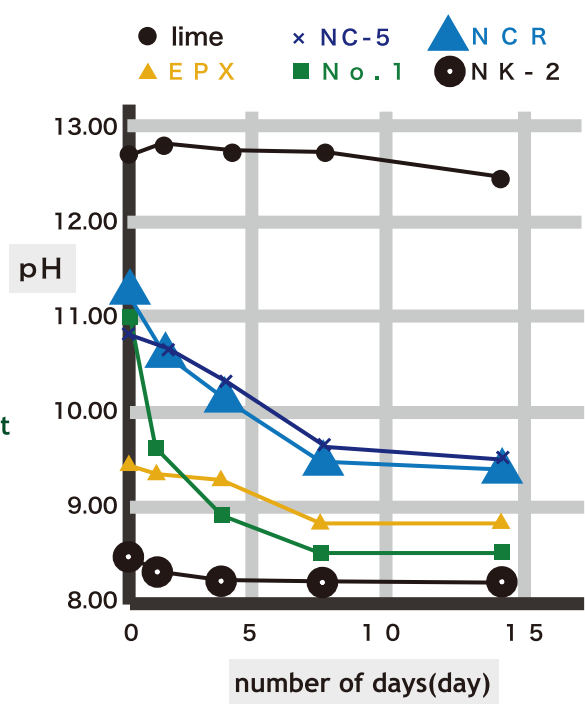
product name	appearance	moisture(%)	pH(/25℃)	BD(g/ml)	Particle Size(μm)
HP-30	gray blown powder	3.5	8.5	0.85	80
U-7B	gray blown powder	1.5	7.5	0.95	90

■ The comparative data between FLOCSITE HP-30 or U-7 and competitor product

character	product	HP-30	U-7	polymer	competitor inorganic	NOTE
E v a l u a t i o n	time of response	◎	◎	○	×	mixing 20sec
	aggrigation shape	◎	◎	×	△	mixing again
	sedimentation velocity	○	◎	×	○	flotation of oil
	sludge viscosity	smaller	small	large	middle	
	SS removal	◎	◎	○	○	muddiness
	COD reduction ability	◎	◎	△	○	Pb and other
	BOD reduction ability	◎	○	△	○	
	Total Nitrogen reduction	○	○	△	△	Total nitrogen
	Total phosphorus reduction	○	○	△	△	Total phosphorus

■ The pH change in solidified soil using Doronnko

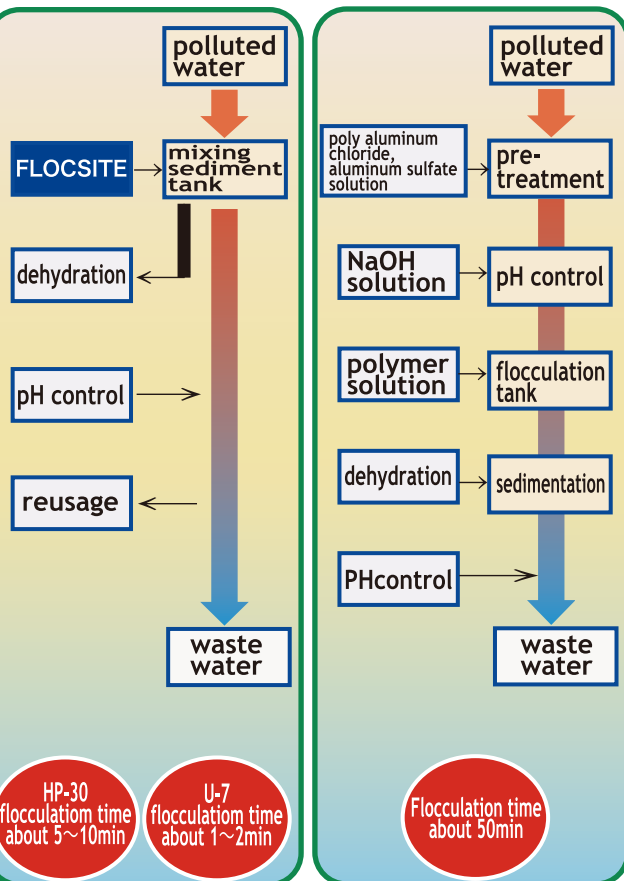
The mud : the rudaceous mud,water content ratio=86%,pH=9.01



Doronnko & FLOCSITE was recognized as the product of 「Made in Niigata」 by Niigata prefecture.



■ Compare flocculation process of FLOCSITE with Polymer





### The summary and use of 「Doronngo Series」

We have many kinds of products for every use in 「Doronngo Series」  
Main components of 「Doronngo Series」 are Kaolin, talc, fine silica sand, calcined magnesite, gypsum and polyacrylamide. They are safe for the environment.  
It reduces the treatment cost and can be used for solid-liquid separation by our high dispersibility flocculant powder 「FLOCSITE」 and 「Doronngo Series」 or adsorbent and 「Doronngo series」.  
Please contact Eco Project for any questions about our Inorganic Solidification.

Product name	uses
Doronngo NO.1	• Soil conditioner for greening • Additive for road slope greening materials
Doronngo NO.7	• Improvement for general high water content soil. • Preparation for agricultural fields Improvement for riverbed Additive for dredged soil.
Doronngo EPX	• Improvement for soft soil of wetland, biotope and bank construction.
Doronngo AC-2	• Solidification for the soil after purification for VOC. • Neutralize the alkaline soil.
Doronngo AC-305	• Neutralization for high alkaline soil. • Heavy metal insolubilization. (Pb, Cr <sup>6+</sup> , As, Cd, Se)
Doronngo NCR	• Improvement for organic soil. Solidification for clay surfaced pavement. • Heavy metal insolubilization. Solidification for concrete sludge.
Doronngo NC-5	• Solidification for general soft soil and mud by piling.
Doronngo NK-2	• solidification for agricultural fields (solidify to middle strength) • Improvement for riverbed and greening.
Doronngo TT-3	• Rapid solidification for organic sludge and sewage sludge. • Sterilizing for sewage sludge Heavy metal insolubilization.

ECO PROJECT INC developed eco-friendly 「Doronngo series」 for inorganic solidification. 「Doronngo series」 show superior performance of solidification for mud, muddy water and soils after construction.  
We do not need to use a dehydrator for the treated mud by 「Doronngo」 and can do granulation and solidification within 5 minutes by a mixer.  
This treated mud is useful for greening and soil conditioner agent and can be used ourselves or sold as the products by using our proper granulation and solidification technique.



### The characteristic of 「Doronngo Series」

1. Neutralize and solidify soil.
2. The treated soil is not muddy again.
3. The treated soil is over 400kN/m<sup>2</sup> in Cone index.
4. Useful for clay surfaced pavement and light weight aggregate.



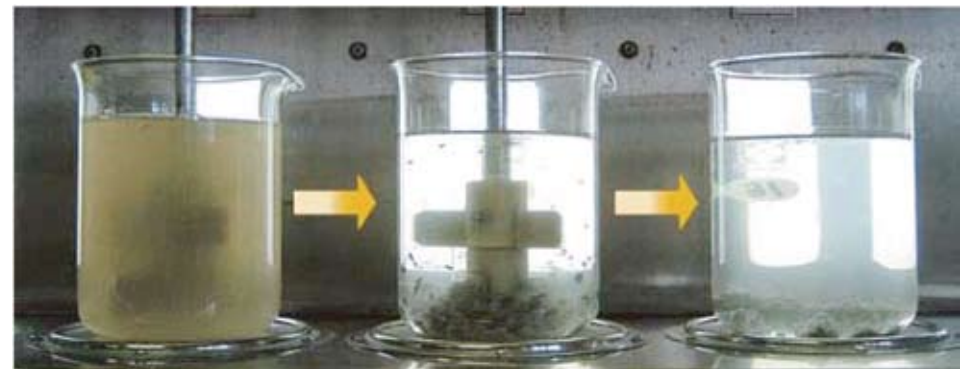
### The usage of FLOCSITE series

We developed high dispersible and eco-friendly Flocculant 「FLOCSITE」, it treats the construction soil, construction mud and muddy water effectively and safely. We promote the recycle action by advanced viewpoints, because the environmental problem causes global warming and abnormal weather.

product name	usage
FLOCSITE HP-30	• The aggregation for high concentrated polluted water of cement milk and bentonite • lower the COD, BOD in polluted water with PAC
FLOCSITE U-7B	• Waste water flocculation for construction waste water and dredging muddy water • The flock very hard and is easy to dehydrate and recycle efficiently.
FLOCSITE G S	• The flocculation for sewage and cloudy seawater • The flocculation for alkaline waste water from red mud and As contained waste water
FLOCSITE G T	• The flocculation for sewage and As contained waste water • Waste water flocculation for the coal fired power plant
FLOCSITE L-10	• The flocculation of Barrel waste water
FLOCSITE D-AE	• The decolorization and flocculation of food waste water, pigment waste water and animal husbandry.
FLOCSITE FS-3	• The insolubilization for Fluorine contained waste water from semiconductor factory • The insolubilization for Pb contained waste water

### FLOCSITE (environmental adaptation type) shows the excellent effect on the aggregation of polluted water.

- We investigated FLOCSITE for many years and FLOCSITE shows the excellent aggregation on the muddy water from the dam or tunnel construction and pondage or gravel gathering.
- FLOCSITE changes muddy water to clear water and shows the better working efficiency.



### The five characteristics of 「FLOCSITE」 series

1. **The excellent aggregation for wide pH range**  
FLOCSITE shows excellent aggregation and granulation effects on propulsive digging muddy water and polluted water by low addition. FLOCSITE U-7 shows fast aggregation within seconds.
2. **The environmental adaption type**  
FLOCSITE is the porous inorganic flocculant and has no environmental loading, treats polluted water safely.
3. **Safety and recycle materials treating by FLOCSITE**  
FLOCSITE makes muddy water the hard floc precipitation and aggregate and they can be recycled safely.
4. **Improve work efficiency**  
We can add high dispersible powder flocculant to muddy water by powder quantitative feeder. Then we mix only and FLOCSITE improves work efficiency.
5. **Enhance the cost performance**  
Total cost is cheaper than conventional flocculant