



Luoyang Qihang Chemical Industrial Co.,Ltd

Product name: Complex Sodium Disilicate

The best placement of STPP and 4A Zeolite

Molecular Structure: $\text{Na}_2\text{O} \cdot 2\text{SiO}_2$



【APPLICATION】 :

Complex Sodium Disilicate is widely used as STPP Substitute in detergent powder such as concentrate detergent powder, Ordinary detergent powder, Phosphorus-free washing powder, Metal-washing powder. These detergent powders all can be washed by hand or washing machine. It is mainly applied in high-tower spray dried technology.

【Specification】 :

Item	Unit	Standard	Inspection
Appearance		white,granule	white,granule
whiteness	%	≥ 85.00	90.00
Ca exchange capacity(CaCO_3)	mg/g	≥ 400	430.00
Na_2O	%	≥ 20	33.40
$\text{Na}_2\text{O} + \text{SiO}_2$	%	≥ 50	63.70
PH	25°C 1%solution	≤ 12.50	11.89
Bulk Density	g/ml	0.48-0.60	0.53
Water insoluble	%	≤ 1.50	0.80
Moisture	%	≤ 5	3.40

【COMP ARISON WITH OTHER DETERGENT BUILDERS】 :

Chart 1: comparison of major detergent builders

	Sodium Tripolyphosphate	4A ZEOLITE	Complex Sodium Disilicate
Environment protection	With phosphorus	Phosphorus free	Phosphorus Free
Solubility	Soluble	Insoluble	Soluble
Pollution	Sewage	Mud	sewage

Chart 2: phosphorus free builder function comparison

	4A ZEOLITE	Complex Sodium Disilicate
Ca exchange ability mgCaCo3/g	285	> = 400
Acidity proof ability MI/0.5mol Hcl	12	135
Soften water	Lon exchange	Lon exchange
Treatment		Chemical reaction forming precipitates
Solubility	Insoluble	Full soluble
Pollution	More mud	sewage

【Features】 :

1. Complex Sodium Disilicate is the best in current phosphorus-free detergent builders, the function is almost same as STPP. It is the best replacement of STPP at present.
2. Complex Sodium Disilicate is completely friendly to each while STPP caused serious pollution.
3. Complex Sodium Disilicate has an excellent solubility in water, even cold water, better than STPP.
4. The price of Complex Sodium Disilicate is much lower than that of STPP
5. Complex Sodium Disilicate can be used same as STPP in producing process, without any change in equipment.
6. Complex Sodium Disilicate is the top cost performance non-phosphorus detergent that is widely used in leather washing and metal cleaning.
7. Complex Sodium Disilicate reduced the phosphor pollution while driving environment protection.
8. Complex Sodium Disilicate mainly used for washing powder, it accounts for it accounts for about 40% of the weight.