KELONG CHEMICAL

Tel / 400 - 155 - 5678
Web / www.kelongchem.com
E-mail / kelong@kelongchem.com

Add / No.36 Wanheqi Road, Hongwei District, Liaoyang City, Liaoning Province, China

LIAONING KELONG FINE CHEMICAL CO.,LTD

BROCHURE

PRODUCT BROCHURE

Polycarboxylate-based superplasticizer and related products

Green Building Materials Entrepreneur

STOCK ABBREVIATION
KELONG CHEMICAL

STOCK CODE
300405

KELONG CHEMICAL

GREEN BUILDING MATERIALS ENTREPRENEUR

KELONG CHEMICAL

INTRODUCTION

SINCE 2002

LIAONING KELONG FINE CHEMICAL CO.,LTD

Liaoning Kelong Fine Chemical Co.,Ltd was founded in 2002, consisting of over 500 staffs by now,which 30 of them are research specialists with master and doctor degree.

The company is a fine chemical supplier based on the ethylene oxide and has satisfied perfect product lines of polycarboxylate -based superplasticizer,cutting fluid of silicon for solar energy, multifunctional finishing agent,coating additives and SCR industrial denitration catalyst production. Its products have been widely used in daily, medicine,spinning and textile printing,coating,printing ink,oil exploitation, metal processing,building and IT industries.

Liaoning Kelong Fine Chemical Co.,Ltd. was an integration of scientific research, production,sales and application of high-tech enterprise. Our products have been passed CRCC certification by China railway production. Company successfully listed on the Shenzhen stock exchange(Kelong Fine Chemical Stock Code:300405) on October 30,2014.

The company comes out among the best suppliers of polycarboxylate-based superplasticizer in domestic, and has customers across the country and products well sold in the United States,Brazil,Russia,Turkey,India,Thailand, South Korea, Vietnam, Malaysia,South Africa, Tunis, etc. We had 8 offices set throughout the country and aim to better serve our customers with the best and quickest quality products and technical supports.

LIAONING KELONG FINE CHEMICAL CO.,LTD

GREEN

BUILDING MATERIALS ENTREPRENEUR

POLYCARBOXYLATE-BASED SUPERPLASTICIZER AND RELATED PRODUCTS

CATALOGUE

LIAONING KELONG FINE CHEMICAL CO.,LTD

KELONG CHEMICAL

POWDER FORM PCE

POLYCARBOXYLATE SUPERPLASTICIZER

LIAONING KELONG FINE CHEMICAL CO.,LTD

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R-209

POLYCARBOXYLATE SUPERPLASTICIZER

PRODUCT INTRODUCTION

R-209 is polymerized by various macromolecule organic compounds, which is specialized for cement grouting and dry mortar. It has good adatability with cement and other admixtures.Due to it can enhance the fluidity,strength of final setting time,and decreased the crack after mortar solidified,so applied in cement non-shrinkage grouting,repair mortar,cement base flooring grouting,water proof grouting,crack-sealer and expanded polystyrene insulation mortar.Further, it also widely applied in gypsum,refractory and ceramic.

TECHNICAL PARAMETER

Items	Index
Appearance	White to yellow powder
Bulk density (g/l)	≥450
PH value (20% aq.solution)	9.0 ~ 11.0
Moisture content (%)	≤3
Loss on ignition (%)	≥86
Chloride content (%)	≤0.1

TECHNICAL INDEX

Test items		Technical index
Water reducing rate (%)		≥25
Bleeding rate at normal pressure (%)		≤60
Air content (%)		≤6.0
Slump variation in 1 hour (mm)		≤80
Ratio of compressive strength (%)	1d	≥170
	3d	≥160
	7d	≥150
	28d	≥140
Ratio of shrinkage (%)	28d	≤110
Difference of setting time (min)	Initial setting	-90~+120
	Final setting	
Freezing-thaw cycling resistance (times)		≥200

MAIN PERFORMANCES

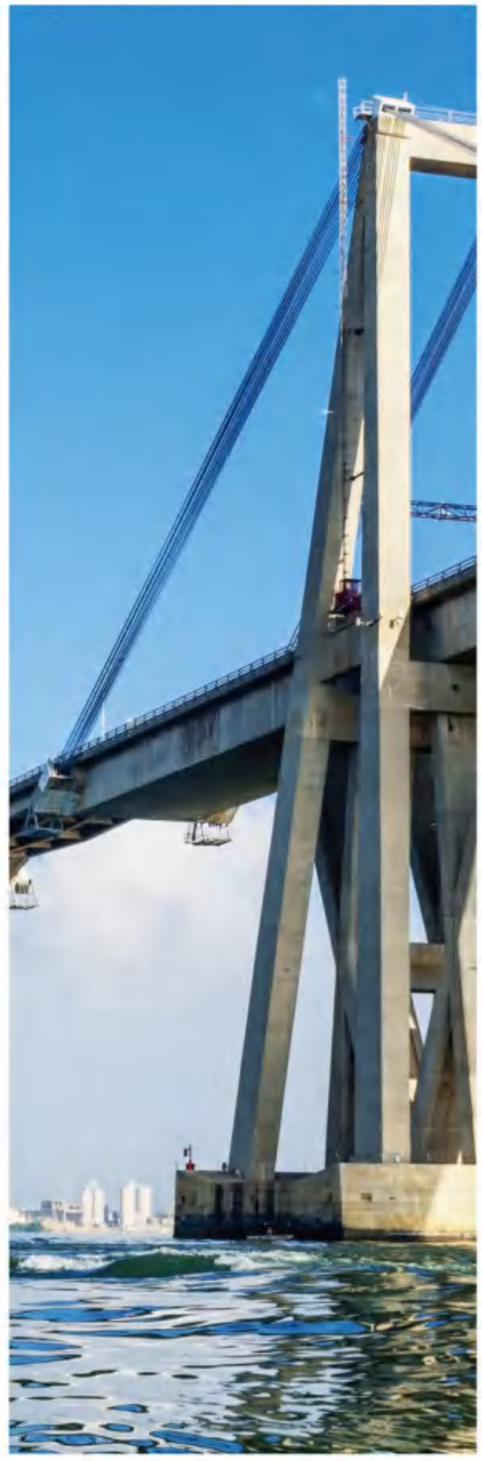
1. High water reducing rate: The water reducing rate can achieve at least 25% for mortar,enhanced the fluidity of mortar greatly.
2. Early strength and high strength: It can improve the early strength of mortar, improve the ultimate strength,it is the best option to the application required rapid curing.
3. High durability: It can decrease the water-binder ratio of the mortar,improve the durability,decreased the creep and shrinkage, crack after mortar solidified.
4. Green environmental product: It is not polluted to the environment, up to the standard of ISO14000.

RECOMMEND DOSAGE

The recommend dosage is 0.2%~0.3%. It can use it directly or dilute with water, compound with other PCE is available.

PACKAGE & STORAGE

1. 25 Kg woven bag package, customized package available.
2. Stored in dry and cool place at room temperature, away from the sunshine.
3. The shelf-life is normally one year.



SP-409

POLYCARBOXYLATE SUPERPLASTICIZER

INTRODUCTION

The product was powdered polycarboxylate superplasticizer with high performance of water-reducing and slump retention, which is independent R&D by Kelong. It has the benefits as follow:

1. High water reducing rate could achieve 25% above, under the conditions of mixing the concrete with the same ratio of the water, the product could improve fluidity greatly;
2. Liquid polycarboxylate superplasticizer is available by diluting the product with just water.
3. The index of performance for this product is the same with the index of pumping agent.
4. It is convenient during usage, it can meet the requirement of building plants in remote area by mixing the product with water.
5. 5.The product has the features of uniforms particles, lower moisture content, excellent solubility, high range water reducing, high slump retention and so on.

TECHNICAL PARAMETERS

Items	Index	Items	Index
Appearance	White to yellow powder	Moisture Content (%)	≤5
Water-reducing rate (%)	≥25	Air content (%)	≤2.7
Slump retention 1 hour (mm)	≤80	Alkali content (%)	≤5
Bulk denisty (g/l)	≥450	Chloride content (%)	≤0.6
Ph value (20% water solution)	9.0±1.0	Fineness, 50 mesh	≤15%

MAIN PERFORMANCES

1. High water reducing rate: It could achieve 25% above, under the conditions of mixing the concrete with the same ratio of the water, the product could improve fluidity greatly;
2. High slump retention performance: Normally carboxylic groups is damaged of ordinary polycarboxylate superplasticizer by the high temperature during dry spray process, this product takes the special process so protect the carboxylic groups and achieve the excellent slump retention ability.
3. Excellent solubility and fast solvability: Due to uniform particles, the specific area is larger, so the product is dissolved quickly in the water then no impurity after dissolving.

APPLICATION

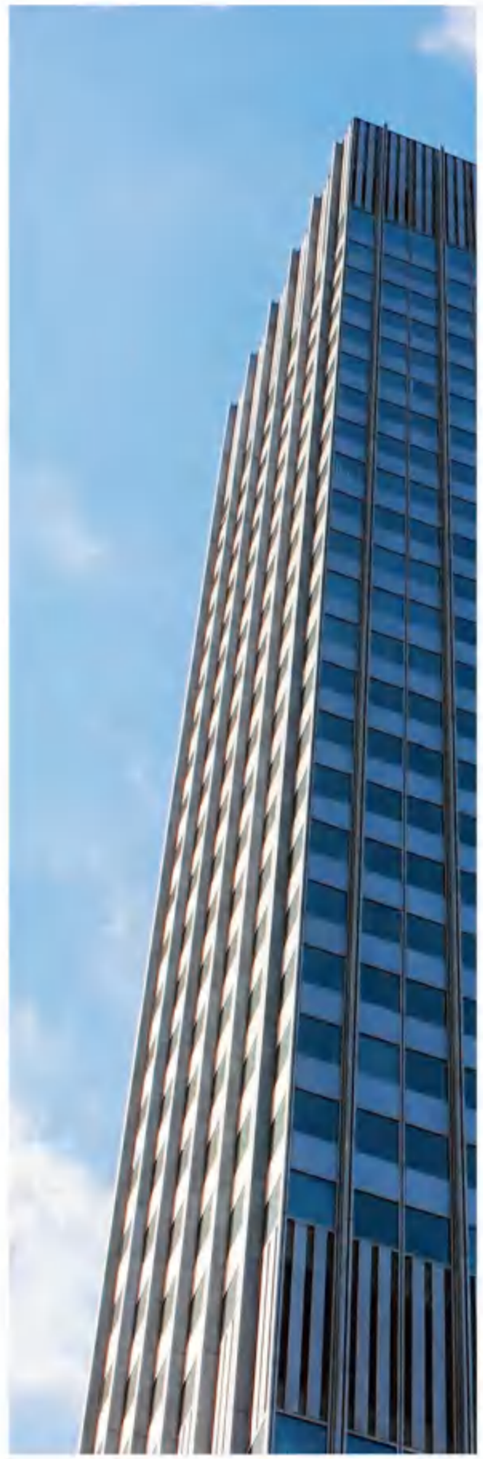
1. The application is same with the the ranges of liquid polycarboxylate superplasticizer, like ready-mix and on-site concrete for civil building and steel fiber concrete.
2. It is still applied in specific concrete has the requirements like high strength high performance,high durability, superfluidity self-leveling & self-compacting.
3. It also meet the requirement of building the plant in the remote area, because of the usage is simple- just need mixing the equipment simply.

RECOMMEND DOSAGE

0.2~0.3% of the aggregate material, it is instead of liquid polycarboxylate superplasticizer after dissolving,the dosage after dissolving reference to the actual solid content of dissolving liquid.

PACKAGE, STORAGE & TRANSPORTATION

1. Packed in 25 Kg plastic woven bag.
2. Customized package is available.
3. Stored in a dry environment with normal temperature (below 40℃),avoid to stack up or heavy load and sunshine, also keep fire away.
4. The shelf-life is one year in the original package, please use it as soon as possible in 180 days after opening.
5. Transportation: Under the condition of general chemical transportation, keep away from moisture.
6. If there is agglomeration in the product, it won't affect the usage,just smash it and before usage.



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LIQUID FORM PCE

POLYCARBOXYLATE SUPERPLASTICIZER

LIAONING KELONG FINE CHEMICAL CO.,LTD

GREEN BUILDING MATERIALS ENTREPRENEUR

PRODUCT INTRODUCTION

SPC-100 was environment friendly, high range polycarboxylate superplasticizer ,which developed by our company. The product has the advantages as follow:

1. Enhanced pumping performance and workability to concrete by outstanding slump retaining ability and higher water-reducing ability.
2. Improved the plastic index and concrete intensity increasing performance.

TECHNICAL PRINCIPLE

The main molecular chain of the product was absorbed in the surface of cement particle firmly,that will impede hydration reaction and improve slump-retaining performance. Side molecular chain was around the cement particle, so it is functional to steric hindrance and electrostatic repulsion that' s why that product have better dispersity and water reducing effort.

CHARACTERISTIC

1. Higher water reducing rate: Water reducing function was achieved by excellent dispersity. Water reducing rate is up to 25%, it can improve the working performance of the concrete, the strength of the concrete strongly and also the amount of cement can be saved plasticity.
2. Molecule Controllability: The water reducing rate, slump-loss retarding and air-entraining performance could be adjusted by the molecular weight of the main chain, the length and carboxylic groups of the secondary chains.
3. Excellent slump retaining ability: The slump retaining ability is excellent, especially in maintaining low slump retention,so workability of the concrete is guaranteed without effecting the normal setting of the concrete.
4. Excellent Cohesiveness: It is cohesive to concrete,so the concrete had better workability, and won' t be layered, bleeding, segregated.
5. Excellent dispersity: With the product, the concrete can get high flowing property, that will be easy to place,suitable to self compacting concrete.
6. High strength growth rate: Higher growth rate of high strength,enhanced the shrinkage and decreased the carbonation ratio of concrete.
7. Wide applicability: Suitable for Portland Cement, Portland Slag Cement.
8. Excellent durability: Low shrinkage ratio, low alkali content, that will enhance the durability of the concrete.
9. Environmental-Friendly: Without methanal and related harmful ingredient.

APPLICATION

1. Suitable for ready mix concrete and on site concrete of industrial usage or civil building usage.
2. Applied in common concrete, pumping concrete, high strength concrete, high performance concrete.
3. Apply to the projects of water conservancy,maritime work,subway, bridge, highway, etc.
4. Suitable for self-compacting concrete, precast.

TECHNICAL INDEX

Items	Specification
Appearance	White to canary liquid
Density (g/cm³)	1.10±0.1
PH value	6.0 ~ 8.0
Solid content (%)	40.5±1.0
Chloride content (%)	≤0.3
Alkali content (%)	≤5

PHYSICAL-MECHANICAL PROPERTIES

Test items		Corporation specification	Test result
Water reducing rate (%)		≥25	29.5
Ratio of bleeding rate at normal pressure(%)		≤60	0
Air content (%)		≤6.0	4.2
Slump change with time (60min)		≤80	40
Ratio of compressive strength (%)	1d	≥170	220
	3d	≥160	206
	7d	≥150	187
	28d	≥140	152

HANDLING NOTES

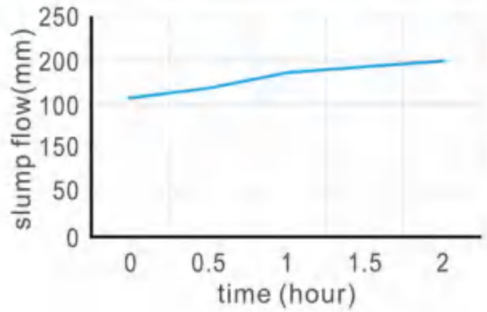
SPC-100 is free from alkaline. It' s not toxic,hazardous, and corrosive.

When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.

PACKAGE & STORAGE

1. 200 Kg plastic drum or 1000 Kg IBC tank.
2. Avoid to the sunshine,store under the temperature of -5℃ to -35℃.
3. The shelf-life is normally one year.

APPLICATION PERFORMANCE



PRODUCT INTRODUCTION

SPF-300 is environment friendly polycarboxylate superplasticizer that developed by the company. The advantage of that product is not only for high water reducing rate but also for HIGH excellent slump retaining performance. It can improve the fluidity of the concrete. The product is widely applied in common concrete, pump concrete, high strength concrete, high performance concrete,especially applied in self compacting concrete.

TECHNICAL PRINCIPLE

The main molecular chain of the product was absorbed in the surface of cement particle firmly,that will impede hydration reaction and improve slump-retaining performance. Side molecular chain was around the cement particle, so it is functional to steric hindrance and electrostatic repulsion that's why that product have better dispersity and water reducing effort. Base on that, the product has the effort about releasing carboxylic groups with dispersing to alkali cement, furthermore,this product can offer better and longer dispersing effort.

RECOMMEND DOSAGE

1. The recommend dosage is 0.35% to 0.65%, the dosage could be adjusted according to the special aggregates.
2. The mix time at least 150s.
3. This product could combine with retarders,de-foamer,air entraining admixtue, sodium lignin sulfonate during usage.
4. This product is concentrated product, we suggest to compound before usage.

APPLICATION

1. Applied in ready mix concrete and on site concrete of industrial building,civil building.
2. Specially suitable for high strength concrete, high durability concrete, self-compacting concrete and so on.

HANDLING NOTES

SPF-300 is free from alkaline. It's not toxic,hazardous, and corrosive.

When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.

PACKAGE & STORAGE

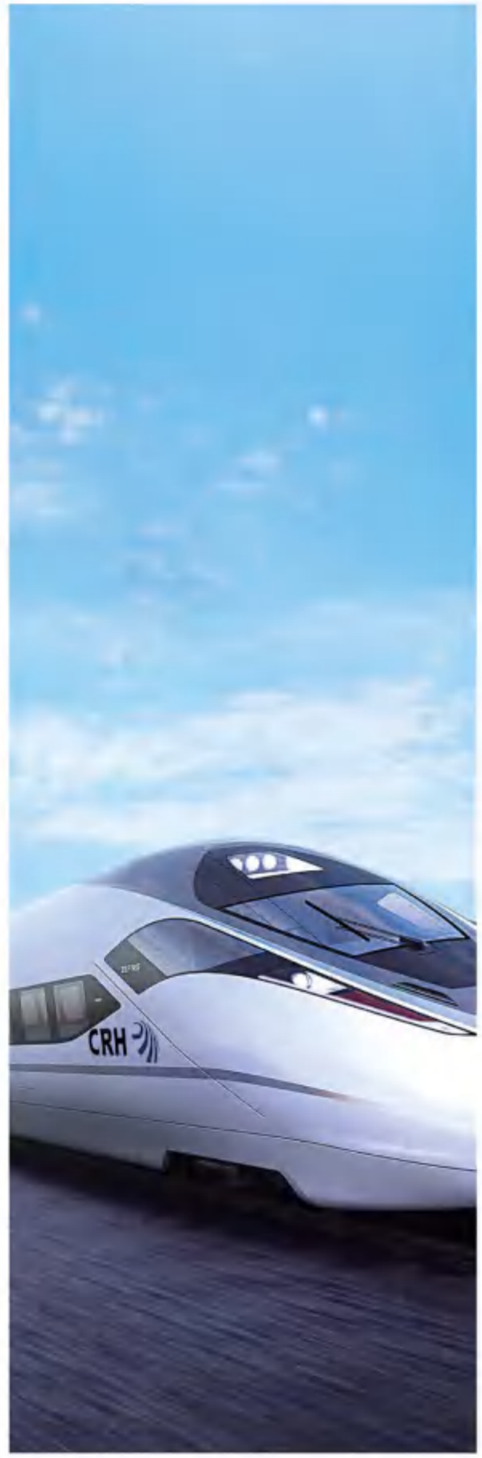
1. 200 Kg plastic drum or 1000 Kg IBC tank.
2. Avoid to the sunshine,store under the temperature of -5℃ to -35℃.
3. The shelf-life is normally one year.

TECHNICAL INDEX

Items	Specification
Appearance	White to canary liquid
Density (g/cm^3)	1.10±0.01
PH value	6.0 ~ 8.0
Solid content (%)	40.5±1.0
Chloride content (%)	≤0.1
Na_2So_4 (%)	≤5
Cement paste fluidity (mm)	≥240

PHYSICAL-MECHANICAL PROPERTIES

Test items		Corporation specification	Test result
Water reducing rate (%)		≥30	33
Ratio of bleeding rate at normal pressure(%)		≤60	0
Air content (%)		≤6.0	3.5
Slump change with time (60min)		≥180	220
Slump change with time (120min)		≥150	190
Shrinkage ratio(%) (28d)		≤110	101
Corrosive to reinforcement bar		/	No
Ratio of compressive strength (%)	1d	≥170	205
	3d	≥160	195
	7d	≥150	170
	28d	≥140	165



SPS-200

SLUMP RETENTION AGENT

PRODUCT INTRODUCTION

This product is environment friendly, slow-release type polycarboxylate superplasticizer that developed by our company. The advantage of that product is controlled-release water reducing, it is suitable for low slump concrete, and concrete required fast slump loss, it can enhance the plastic retaining of the concrete.

MAIN CHARACTERISTICS

1. **Excellent slump retaining ability:**
It can control the speed of hydration during initial cement hydration period and induction period.

2. **Controlled release ability:**
The product has the feature likes water reducing rate is low in initial setting time, water reducing rate is higher in final setting time. It has excellent controlled-release dispersity to cement.

3. **Strength growth rate:**
Higher strength growth rate, with this product, the initial setting time and final setting time will not change . It overcomes the disadvantage of retarders in final setting time is too long,early strength increased slow.

4. **Special adaptability:**
Widely applied in common concrete,pumping concrete,super fluidity self-compacting concrete and high strength high durability concrete. It can control the slump loss of fluidity effectively and this product is special suitable for nuclear power project,railway, subway precast pipe.

DOSAGE

1. We suggest compound with other PCE during usage. Compounding ratio according to take cement for concrete test. Recommend dosage is SPS-200 mass ratio=8:2~7:3

2. Mixing time at least 150s.

3. This product could combine with retarders,defoamer,air entraining admixture, sodium lignin sulfonate during usage.

APPLICATION

The product is suitable for water conservancy project, martime work, port engineering, bridge engineering, subway engineering.

HANDLING NOTES

SPS-200 is free from alkaline. It' s not toxic,hazardous, and corrosive.

When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.

PACKAGE & STORAGE

1. 200 Kg plastic drum or 1000 Kg IBC tank.

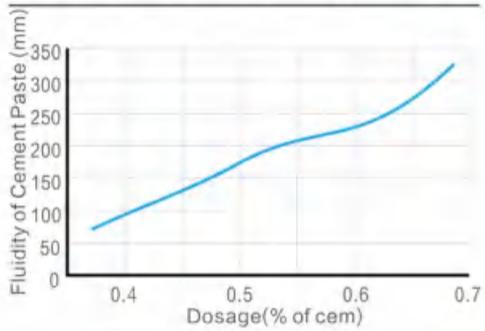
2. Avoid to the sunshine,store under the temperature of -5℃ to -35℃.

3. The shelf-life is normally six months.

TECHNICAL INDEX

Items	Specification
Appearance	Canary liquid
Density (g/cm^3)	1.05±1.10
PH value	3.0 ~ 6.0
Solid content (%)	40.5 ± 1.0
Chloride content (%)	≤0.1
Na_2So_4 (%)	≤5

APPLICATION PERFORMANCE



KL -1397

MUD-RESISTANT AGENT

PRODUCT INTRODUCTION

KL-1397 is polycarboxylate superplasticizer(mud-resistant type) is developed by our company. The product solves the problem of slump loss quickly for the sand-gravel with mud,enhance the workability of fresh concrete. It is applied in common concrete, pumping concrete, ready mix concrete, and concrete required mud-resistant.

TECHNICAL PRINCIPLE

The product contain hydrophobic groups and hydrophilic groups both, so dispersity and water reducing ability is good. The molecular action to electrostatic force of cement particle is vertical, that is why it can enhance the workability, slow-release on mud-resistant, enhance the slump retaining ability of the concrete.

CHARACTERISTICS

1. Excellent mud-resistant ability: Decrease the slump loss for the sand-gravel contain mud.
2. Excellent slump-retention ability: It can control the hydration speed effectively during cement initial period and cement induction period.
3. Enhance the workability of the concrete: Enhance cohesiveness of concrete greatly, enhance encapsulated ability of sand-gravel aggregate greatly, enhance fluidity of concrete greatly.

RECOMMEND DOSAGE

1. The product can use it separately or combine with other PCE, recommend dosage is 0.5% to 0.16% when the proportion is 7:3. the dosage could be adjusted according to the special aggregates.
2. For high mud containing, we suggest combine with SPC-100, proportion is SPC-100: KL-1397=7:3.
3. Mixing time at least 150s.

HANDLING NOTES

KL-1397 is free from alkaline. It' s not toxic,hazardous, and corrosive.

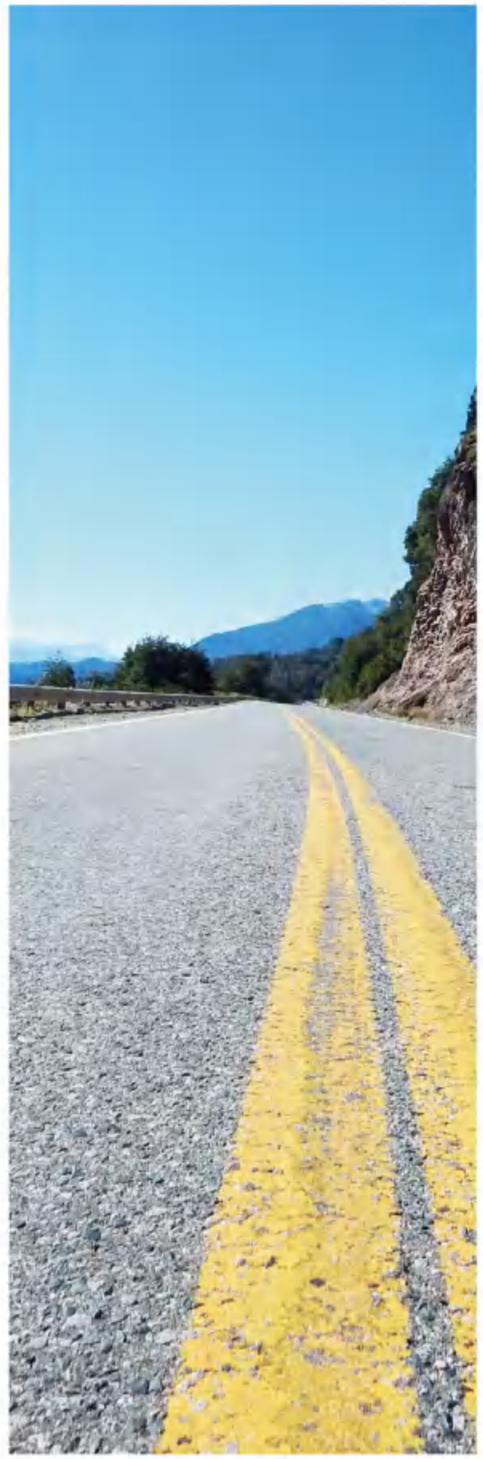
When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.

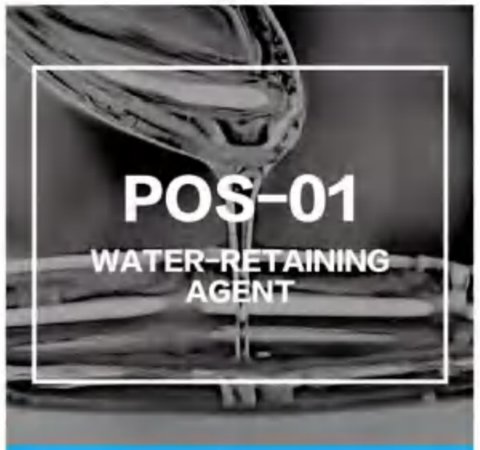
TECHNICAL INDEX

Items	Specification
Appearance	Yellow liquid
PH value	1±0.5
Solid content (%)	70±2

PACKAGE & STORAGE

1. 200 Kg plastic drum or 1000 Kg IBC tank.
2. Avoid to the sunshine,store under the temperature of -5℃ to -35℃.
3. The shelf-life is normally one year.





DESCRIPTION

POS-01 applied in pumping concrete as water retaining component, plastic retaining component,it enhance property of slump retention and water retention during transportation.

METHOD OF USE

The dosage is 0.1—0.5‰ of cementing material during concrete construction. It is advisable to make trial mixes before use.

CHARACTERISTICS

1. Excellent cohesiveness: The cohesiveness is excellent for pumping concrete, with POS-01, the workability of pumping concrete improved greatly, and will not be bleeding, delaminating, segregating.
2. Wild adaptability: It is suitable for various of Portland Cement, Ordinary Portland Cement, Portland Slag Cement, Pumping concrete with aggregates, also offering excellent plastic effort and water retaining effort.
3. Better compatibility: It has better compatibility to PCE.It effect less to rheology, gelation time on the dosage range.
4. Environment Friendly: Without methanal and other harmful ingredient.

APPLICATION

1. Suitable for pumping concrete
2. Especially suitable for railway, traffic, bridge, subway, and electric power and so on.

HANDLING NOTES

1. It is free from alkaline. It is not toxic, hazardous, and corrosive. It is inedible.
2. When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.Consult the physician if the irritation persists.
3. MSDS can be supplied.

PACKAGE & STORAGE

1. 200 Kg drum or IBC tank.
2. stored at 0-35℃, far away from sunlight.
3. The shelf-life is normally one year.

PRODUCT INTRODUCTION

This product is environment friendly, viscosity reducing & slump retaining type polycarboxylate superplasticizer,which developed by our company. The aim of that product is to solve the problems like water reducing rate is low of slump retaining type PCE. The product maintain the slump retaining ability without and increased the water reducing rate, the product can use it separately or combine with other PCE, the dosage is low, and offer workability, low viscosity,no layering, no bleeding, no segregating, no packing to the concrete.

DOSAGE

1. The recommend dosage is 0.15% to 0.8%, the dosage could be adjusted according to the special aggregates.
2. The mix time at least 150s.
3. This product could combine with retarders,defoamer,air entraining admixtue, sodium lignin sulfonate during usage.
4. This product is concentrated product, we suggest to compound before usage.

CHARACTERISTICS

1. Higher water reducing ability and excellent slump retaining ability: Balanced equally.
2. Better compatibility: Better compatibility to PCE.
3. Low dosage: 0.15%-0.8%
4. Obvious viscosity reducing effort: With this product,the viscosity of fresh concrete is low, soft, good cohesiveness, convenient for air entraining, compacting well and concrete appearance uniform after hardening.
5. Better dispersity: Increase the fluidity of concrete, easy to place and compact.
6. Environment Friendly: The product without methanal or any harmful ingredient.

APPLICATION

1. Applied in common concrete, pumping concrete, the concrete required high slump-retaining,high water reducing widely.
2. Applied in ready mix concrete and on site concrete of industrial and civil building engineering.
3. Suitable for high strength concrete, high performance concrete,high durability concrete,pumping concrete required high fluidity,concrete required high slump retaining during long-distance transportation.

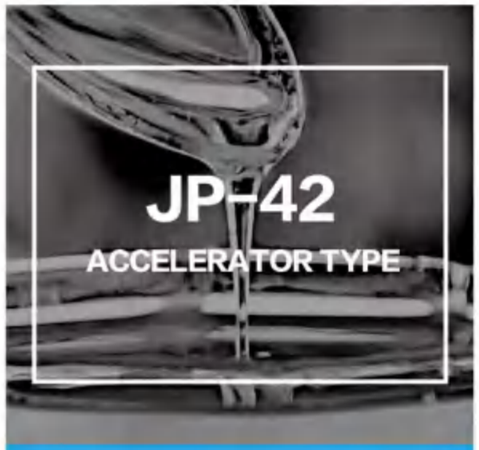
HANDLING NOTES

PR-1060 is free from alkaline. It' s not toxic,hazardous, and corrosive.

When it contacts to eyes and skin, the affected area shall be immediately rinsed with plenty of water for minutes.

PACKAGE & STORAGE

1. 200 Kg plastic drum or 1000 Kg IBC tank.
2. Avoid to the sunshine,store under the temperature of -5℃ to -35℃.
3. The shelf-life is normally one year.



JP-42

ACCELERATOR TYPE

PRODUCT INTRODUCTION

JP-42 is polymerized by various macromolecule organic compounds.It belongs to polycarboxylate-based grafted copolymer superplasticizer. It can be widely used in water conservancy project, electrical power project, port project, railway project, bridge project, highway project and main structure cement casting of civil building.

RECOMMEND DOSAGE

The recommended range of dosage in various powder materials shall be accounted of 0.2-0.3% of cementing material.

APPLICATION

JP-42 is a special polycarboxylate-based superplasticizer for dry mortar. It has a good adaptability with cement and other admixtures and has been widely used in non-shrinkage grouting material, mechanical grouting material, repair mortar, cement-based mortar, waterproof mortar, crack-sealer and thermal mortar, and other cement-based dry powder material. It has been proved to be very helpful in improving the fluidity, early and final strength and the decreasing the shrinkage crack at the last stage of the mortar hardens. Besides, the product is applicable to the gypsum-based dry powder material, fire-proof material and ceramics.

TECHNICAL PRINCIPLE

1. **High Water reducing Rate:**
Water-reducing rate of the mortar can reach above 20%, and the fluidity of the mortar can be greatly improved when adding the same amount of water.

2. **High Early-Strength:**
it is able to improve the early strength and the limit strength of the mortar.

3. **High Durability:**
it is able to reduce the water-binder ratio, and enhance the durability perform-ance, decrease the shrinkage and creep deformation and reduce shrinkage crack at the last stage of the mortar hardens.

4. **Environment Friendly Product:**
No pollution is caused to natural environment during the production; totally meet the international standard of ISO 14000 Environment Protection Management.

PACKAGE & STORAGE

1. The package is 25 Kg woven bag.

2. Customized package is available.

3. Store in a dry place with a normal temperature (below 40℃), no stacking or great pressure to avoid caking products.

4. This product can be kept for 12 months in the original package, and it shall be put in use within 60 days in case of opening the original package.

5. This product shall be transported according to the standard of common chemical products.

TECHNICAL INDEX

Items	Specification
Appearance	White flake
PH value (20℃ aqueous solution)	4.0±1.0
Moisture content (%)	≤1
Chloride content (%)	≤0.1
melting point (℃)	50 ~ 60
Na_2So_4 (%)	≤5
Cement paste fluidity (mm)	≥240

PHYSICAL-MECHANICAL PROPERTIES

Test items		Specification
Water reducing rate (%)		≥25
Ratio of Compressive Strength (%)	1d	≥175
	3d	≥160
	7d	≥155
	28d	≥140
Air content (%)		≤6.0
Ratio of bleeding rate (%)		≤60
Ratio of shrinkage (28d)		≤110
difference in setting time (min)	Initial setting time	-90 ~ +120
	Final setting time	
Number of cycles of resistance to freezing and thawing(time)		≥200
Slump retention (60min) / (mm)		≤80

KELONG CHEMICAL

CEMENT GRINDING AID

LIAONING KELONG FINE CHEMICAL CO.,LTD

GREEN BUILDING MATERIALS ENTREPRENEUR

PRODUCT INTRODUCTION

This product was belong to surfactant, it can improve the fluidity and dispersity of the powder thus enhanced the efficiency of grinding for the powder during added the product to grinding materials. When adding adequate that product to grinding materials, the product was absorbed into crack and decreased the surface free energy,that is beneficial to enhancing the efficiency of grinding. That product also has the advantages as follow:

1. Crack of cement particle is opened and keep opening when the molecule of the product was absorbed, so cement particle will accelerate the size and decrease the rate.
2. The polar molecule of the product is available to neutralize with The electric charge of grinding clinker.
3. The ultimate function of the product is despersing cement particle, achieving the best grinding effort.
4. The early strength, late strength and other performance of cement could be increased when the product improve the grinding performance.

PHYSICAL PARAMETERS

Items	Index
Appearance	White to brown liquid
PH value	8 – 10
Density (20℃)	1.18±0.05

TECHNICAL PARAMETERS

Quality Standard	Accorded with the quality standard of Q/KLH15-2011, had no harmful effect to concrete and cement
Application	Ordinary portland cement, Pure portland cement, Slag cement and composite cement.
Dosage	0.08%-0.12%
Effort	• Improve 10%-20% of the output. • Improve 3-5 Mpa Strength of the cement in 3 days. • Improve 5-8 Mpa Strength of the cement in 28 days. • Save 8% above of the clinker to the same brands cement. • Grinding cement chloridion is less two out of ten thousand

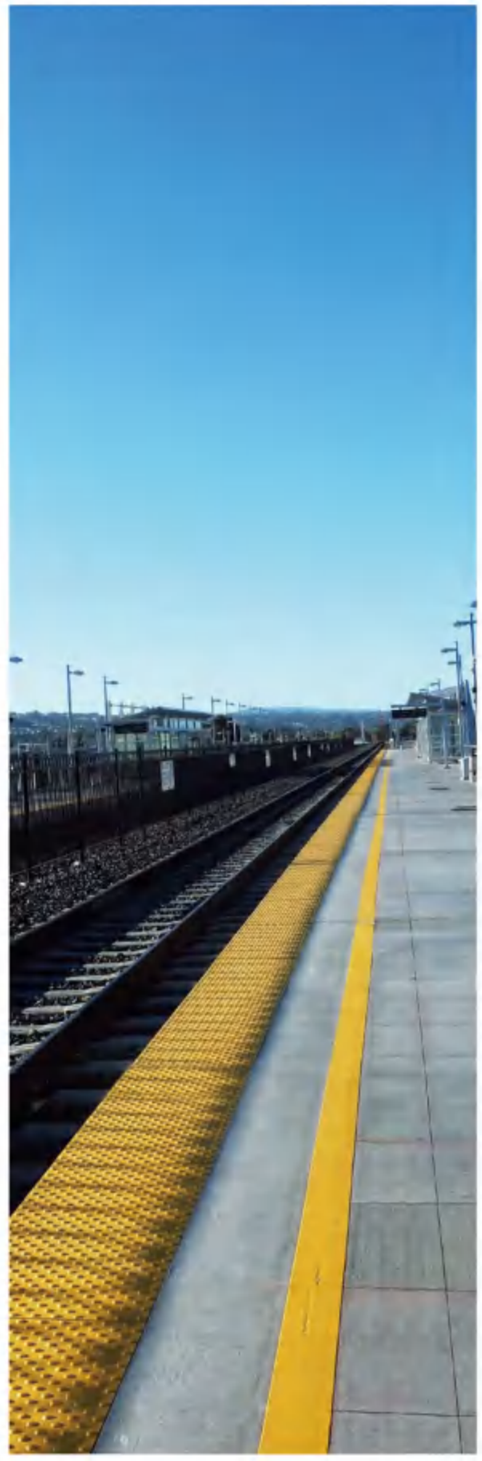
DOSAGE

The dosage of every minute followed formula: L=(M*G)/(D*C*60)

- L : addition of cement grinding/ton(ml/min)
- M : admixing quantity of cement grinding/ton(g/t)
- G : output of grinder/hour(t/h)
- D : proportion of cement grinding aid
- C : dilution proportion of usage

PACKAGE&STORAGE

1. 200 Kg plastic drum or IBC tank.
2. Avoid to sunshine.
3. The shelf-life is normally one year.



KELONG CHEMICAL

MACROMONOMER OF PCE

LIAONING KELONG FINE CHEMICAL CO.,LTD

GREEN BUILDING MATERIALS ENTREPRENEUR

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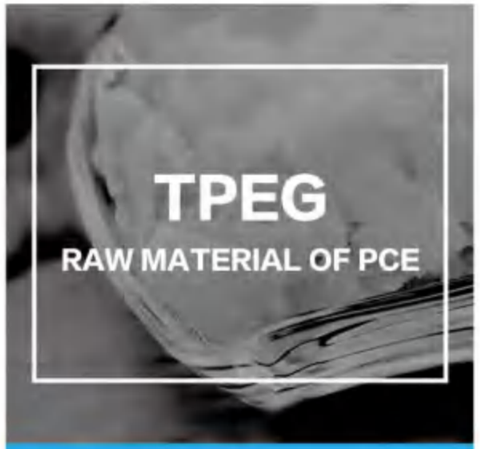

DESCRIPTION

TPEG is a new complex raw material of high performance polycarboxylate water reducer researched & developed by our company. High performance polycarboxylate water reducer has passed testing and checking by authorized organization and fully conform with polycarboxylate water reducer standard JG/T 223-2007 and requirement for temporary technical conditions of high performance concrete passenger transportation special line.

APPLICATION

Mainly for manufacturing high performance polycarboxylate water reducer.

PHYSICAL & CHEMICAL PROPERTIES

Items	Index
Appearance	White to yellowish flake
Bulk density (Mg/KOH/g)	23.5±2.0
PH value	6.0~9.0
Degree of unsaturation (Mol/kg)	≥0.370

CHARACTERISTICS

1. High active catalyst & special synthesis technical process.
2. High double bond retention rate & low cost.
3. Excellent adaptability to cement.
4. 1.1% TPEG(22%) is added in concrete, water reducing rate is above 30%.
5. Improving early strength & strength after 28days Compressive strength 1day≥180 3days≥170 7days≥160 28days≥150.
6. Greatly reducing W/B ratio, shrinkage and creep, improving durability.
7. Low slump loss, slump retention index ≥190mm .
8. Complying with ISO14001: 2004 certification, content of chloride ion≥0.1%.

PACKAGE & STORAGE

1. Packed in 25 Kg bag.
2. Stored at cool and ventilated place.
3. The shelf-life is normally one year.

DESCRIPTION

HPEG is a new polycarboxylate macromonomer derived from TPEG.

PHYSICAL & CHEMICAL PROPERTIES

Items	Index
Appearance	White to yellowish flake
Bulk density (Mg/KOH/g)	23.5±2.0
PH value (5%aq.solution)	8.0~11.0
Degree of unsaturation (Mol/kg)	≥0.390

CHARACTERISTICS

1. High water reduction, high early strength, low alkali, low foam, low energy consumption.
2. High slump retention, increase 5% than that of KLT-9 on the same water reducing rate.
3. Compounding with unique monomer, mixing volume is 0.6% by HPEG.
4. Easy to polymerize.

PACKAGE & STORAGE

1. Packed in 25 Kg bag.
2. Stored at cool and ventilated place.
3. The shelf-life is normally one year.