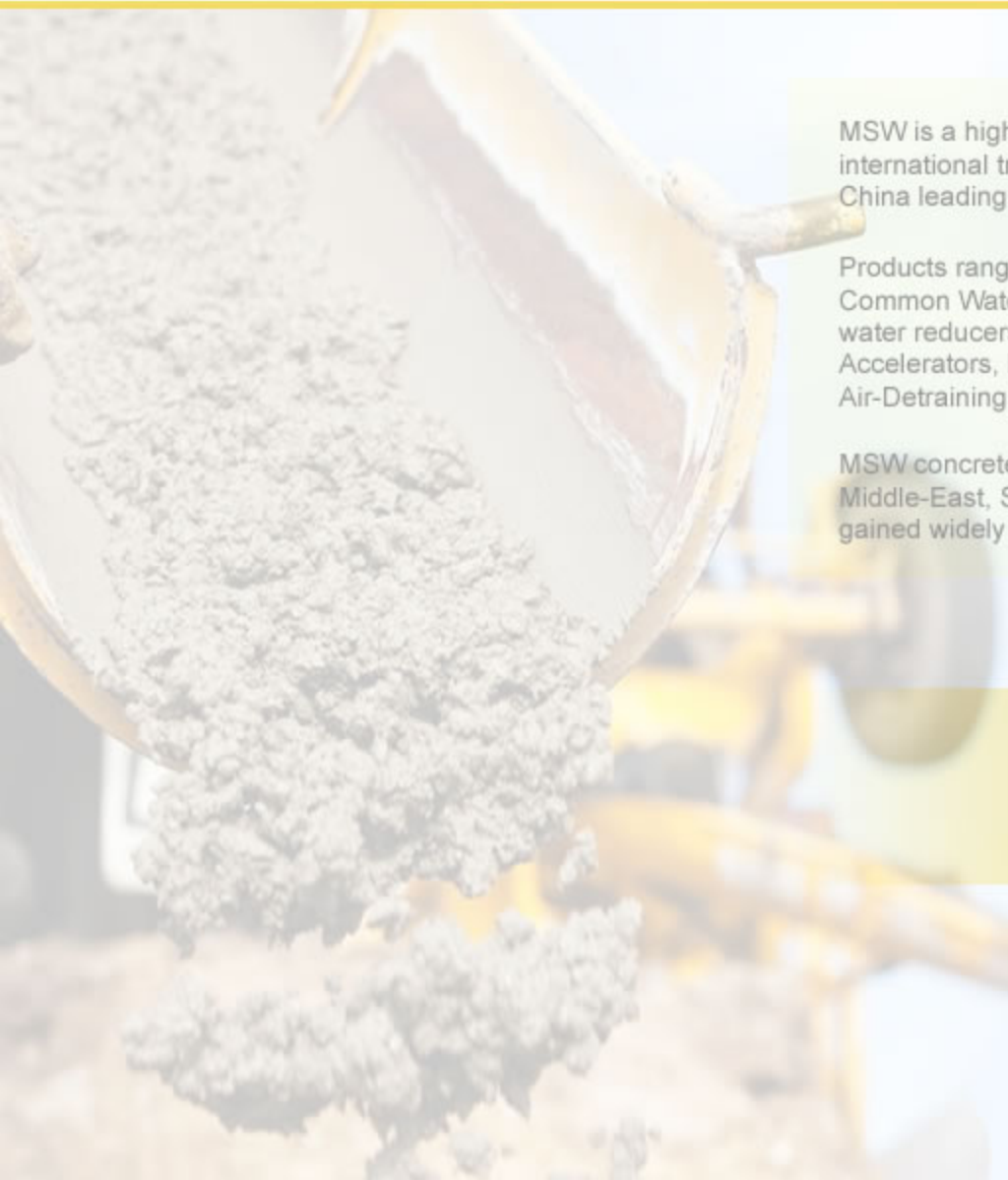


**MSW漫森**

**CONCRETE ADMIXTURES**  
**SOLUTIONS**



## CONCRETE ADMIXTURES SOLUTIONS



MSW is a high-tech group company, focus on Concrete Admixtures R&D, manufacturing, international trade and services. MSW technology have annual output 500000 Mts factory, is China leading concrete admixtures solutions provider company.

Products range include: High Performance Water Reducers, High Efficiency Water Reducers, Common Water Reducers, Polycarboxylate PCE Superplasticizer, Naphthalene Sulfonate water reducers, Aliphatic water reducers, Sodium Lignosulfonate water reducer, Retarders, Accelerators, Early Strength Agents, Air Entrainers, Foaming Agents, Expanding Agents, Air-Detraining Agents and Defoamer etc.

MSW concrete admixtures have been sold to USA, England, Germany, Italy, Turkey, Russia, Middle-East, South Africa, India, Thailand, Vietnam, Malaysia, Argentina, Brazil etc, and gained widely appreciations from our customers.



Website: [www.Admixtures.cn](http://www.Admixtures.cn)

# WR-M

## Sodium Lignosulphonate

SP-M  
RP-M  
AP-M

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C494 Type

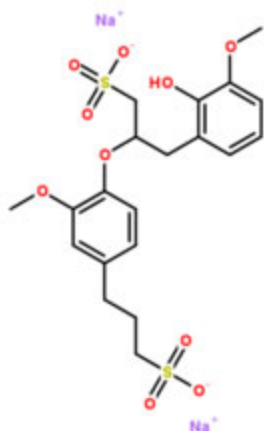
# WR SERIES

SP-M  
RP-M  
AP-M

## WATER REDUCERS

water-reducing rate up to **10%**

Solid Content	50%
Reduzate	<8%
Water Insoluble	<1.5%
Ph	7-9
Water Content	<5%
Fineness	120目
Residue On Sieve	≤4%



- 1.SP for the minimum temperature greater than 5 °C. Strength grade less than C40 concrete
2. AP for room temperature greater than -5 °C. In the hot environment should not use early strength
- 3.RP for mass concrete, RCC, large area pouring concrete, hot weather conditions can be used



Items		WR-AP-M	WR-SP-M	WR-RP-M
water Reducing Rate %		> 8	> 8	> 8
bleeding Rate %		< 95	<100	< 100
air Content %		< 4.0	< 4.0	< 5.5
setting time/min	initial set	(-90 to +120)	(-90 to +120)	> +90
	final set			
after 1 hour	slumps/mm	-	-	-
	air content/%	-	-	-
compressive strength rate/%	1 d	> 135		
	3 d	> 130	> 115	
	7 d	> 110	> 115	> 110
	28 d	> 100	> 100	> 110
ratio of shrinkage/%	28 d	< 135	< 135	< 135
relative survivals(200times)/%		-	-	-

# HWR-N

## Naphthalene Sulfonate

SP-N  
RP-N

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**HWR**  
SERIES

SP-N  
RP-N

### Water Reducers / Superplasticizer

water-reducing rate up to **25%**

Appearance	Powder
Color	Light Brown
Solid Content(%)	> 92
Content of Chloride(%)	< 0.3
PH value	7-9
Net Starch Fluidity(mm)	>250
Surface Tension(N/m)	(70±1) X 10 <sup>-3</sup> N/M

1. Suitable for preparation of early-strength, high-strength, high-anti-filtration and self-sealing & pumpable concrete
2. Widely used in pre-cast & ready-mixed concrete, armored concrete and pre-stressed reinforced concrete in key construction projects
3. Compatible with Portland cement, normal Portland cement, Portland slag cement, fly-ash cement and Portland pozzolanic cement etc.

HWR		SP-N5	SP-N10	SP-N20
Water Reduction %		18-28	17-25	16-22
Water Penetration %		79	80	85
Air Content %		2.0	2.0	2.0
Temporal Distribution for setting (min)	Initial setting time	-90 ~ +120	-90 ~ +120	-90 ~ +120
	Terminal setting time			
Compression strength, %	1 d	170	165	160
	3 d	160	155	150
	7 d	145	140	140
	28 d	135	130	125
Shrinkage, %	28 d	82	85	88
Corrosion to steel bars		None	None	None

Note: Standard blend dosage: 0.75 % (as cement amount)



# HWR-Z

Aliphatic Hydroxyl Sulphonate

SP-Z  
RP-Z

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C494 Type

HWR  
SERIES

SP-Z  
RP-Z

## Water Reducers / Superplasticizer

water-reducing rate up to 20%

Color	Brown
PH	9 - 10
Active Matter Content	> 90%
Water Content	< 7%
Water Insoluble	< 3%

1.RP use for mass concrete, RCC, large area pouring concrete, The minimum temperature is greater than 5 °C.

2. Widely used in pre-cast & ready-mixed concrete, armored concrete and pre-stressed reinforced concrete in key construction projects

3.SP is usually used for temperatures greater than 0 °C and can be used for steaming concrete

Items		HWR-SP-Z	HWR-RP-Z
water Reducing Rate %		> 14	> 14
bleeding Rate %		<9	< 100
air Content %		< 3.0	< 4.5
setting time/min	initial set	(-90 to +120)	> +90
	final set		
after 1 hour	slumps/mm	-	-
	air content/%	-	-
compressive strength rate/%	1 d	> 140	
	3 d	> 130	
	7 d	> 125	> 125
	28 d	> 120	> 120
ratio of shrinkage/%	28 d	< 135	< 135
relative survivals(200times)/%		-	-



# HRWR-BT PCE

Polycarboxylate Superplasticizer

SL-JBT  
RL-JBT  
AL-JBT

# MSW 漫森

## HIGH SLUMP LOSS RESISTANT

Set Accelerating-type / Set Retarding-type

water-reducing rate large than **35%**

Appearance	Liquid
Color	Brown
Solid Content(%)	40/45/50
Air Content(%)	2-4
Content of Chloride(%)	0
PH value	6-8
Total Alkali Content	< 0.1
Sodium Sulfate	< 0.5

1. High water reduction, low dosage, slump small, non-toxic pollution
2. Good applicability with high-grade cement
3. Used in ready-mixed concrete, pumping concrete, mass concrete

### NOTICES



PACK: 1000KG IBC tank



STORAGE: 5 - 35°C



EXPIRATION DATE: 6 Month

## HRWR SERIES



储存运输 STORAGE TRANSPORT



200kg 圆桶包装



1000kg 吨桶包装



罐车运输



液体集装箱

# PCE-Mother Liquor

Polycarboxylate Superplasticizer

HRWR  
SERIES



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## HIGH WATER REDUCTION

(Main Components: Macromonomer)

water-reducing rate large than 35%

Appearance	Liquid
Color	Light Yellow
Solid Content (%)	40/45
PH	6.5±1
Density(g/cm 3)	1.15±0.02

1. High water reduction, low dosage, slump small, non-toxic pollution
2. Good applicability with high-grade cement
3. Used in ready-mixed concrete, pumping concrete, mass concrete

## NOTICES



PACK: 1000KG IBC tank



STORAGE: 5 - 35°C



EXPIRATION DATE: 6 Month

储存运输 STORAGE TRANSPORT



200kg 圆桶包装



1000kg 吨桶包装



罐车运输



液袋集装桶

# MSW-RE

Sodium Gluconate

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## Retarders for Concrete

Color	White or Yellow
Content	99%
State	Powder
Sulfate	< 0.05%
Reduzate (C <sub>3</sub> H <sub>12</sub> O <sub>6</sub> )	< 0.5%
Chloride	< 0.07%
PH (10% water)	6.5-7.8
arsenic salt(As) mk/kg	< 2%

1. The setting time of concrete is delayed significantly
2. Use for long distance carriage, self-compacting concrete, mass concrete
3. Use in the lowest temperature is greater than 5 °C

## NOTICES



PACK: 25kg paper bag



STORAGE: Keep cool, dry and moisture resistant



EXPIRATION DATE: 12 Month

儲存運輸 STORAGE TRANSPORT



25kg紙筒包裝



25kg袋裝



公路運輸



集裝箱海運



# MSW-ES

inorganic salt / organic compounds

# MSW漫森

## Early Strength Agents

(State: Gray or Brown Powder)

# CONCRETE

ADMIXTURES



Items		HUPAN-ES
water Reducing Rate %		-
bleeding Rate %		< 100
air Content %		-
setting time/min	initial set	> +90
	final set	
after 1 hour	slumps/mm	-
	air content/%	-
compressive strength rate/%	1 d	
	3 d	
	7 d	> 100
	28 d	> 100
ratio of shrinkage/%	28 d	< 135
relative survivals(200times)/%		-

1. Use for steam-curing concrete,
2. Be applied to early-strength concrete construction projects
3. Not suitable for mass concrete, hot weather, the lowest temperature is less than -5 °C project.

## PACKAGING

儲存運輸 STORAGE TRANSPORT



25kg紙筒包裝



25kg袋裝



公路運輸



集裝箱海運

# MSW-AC

## Aluminum Oxygen Chamotte

# MSW漫森

### Accelerators for Concrete

# CONCRETE

ADMIXTURES



State	Powder or Liquid
Color	Gray
Fineness	< 12.6
Compressive Strength	1D > 8Mpa
Compressive Strength	28D > 75Mpa
Initial set	2-3 min
Final set	8-10 min

1. Use for sprayed concrete, sprayed mortar
2. Powder for dry type, liquid for wet type construction

### NOTICES



PACK: 1000KG IBC tank or Ton Bag



STORAGE: 5 - 35°C



EXPIRATION DATE: 12 Month

储存运输 STORAGE TRANSPORT



200kg 圆桶包装



1000kg 吨桶包装



罐车运输



液袋集装桶

# MSW-FA

FA-D  
FA-Z

# MSW漫森

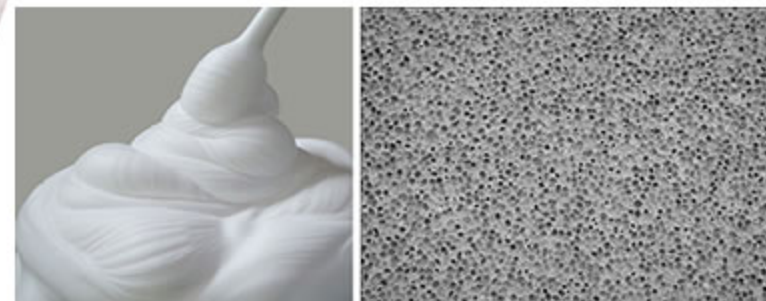
## Foaming Agent

Applicable to Foam Concrete

# CONCRETE ADMIXTURES



1. FA-Z: The foaming agent is resistant to storage, is not easily deteriorated, has excellent foaming energy, rich in foam, foam stability is moderate
2. FA-D: The best performance, the most stable foam, the bubble can be issued for 24h



Type	FA-Z	FA-D
Color:	Yellow	Brown
Components:	vegetable protein	animal protein
Dosage:	Standard	Large
Stomata States:	connected bubble	closed bubble
Soamability:	Better	Good
foaming stability:	Good	Better
Pour Thickness:	< 0.2 Meter	> 1.5 Meter
Thermal Insulation Properties:	Good	Better
Waterproof Properties:	Bad	Good
Compressive Strength:	Good	Better
Purpose:	Ground and Roof insulation	Foam brick Foam Insulation Board



TYPE	MSW-AE	MSW-EA	MSW-AD	MSW-AF	MSW-WP	MSW-AA
<b>Name</b>	Air Entrainers	Expanding Agents	Air-Detraining Agents	Anti-freezing Agents	Water-proofing Agents	Anti-corrosion Admixture
<b>Application</b>	antifreeze reduce segregation & bleeding	self waterproofing joint & fill projects	Improved strength Defoamer	winter construction	waterproofing anti-leakage structure	RC and prestressed concrete
<b>State</b>	Liquid / Powder	Powder	Liquid	Liquid / Powder	Powder	Liquid / Powder



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