

# Super Absorbent Polymers (SAPs)



Super Absorbent Polymers boost efficiency in industry and at home

HI-SWELL™ Super Absorbent Polymers (SAPs) are suitable for applications where high water absorbance and excellent stability, regardless of heat and light, is required.

It's all about **the chemistry™**

 **SONGWON**

# Super Absorbent Polymers (SAPs)

Super absorbent polymers (SAPs) can absorb and retain extremely large amounts of a liquid relative to their own mass.

SONGWON Super absorbent polymers exhibit quick, high water absorbency and excellent stability, regardless of heat and light.

SAPs only swell aqueous solutions and do not easily release absorbed liquid, even under pressure.

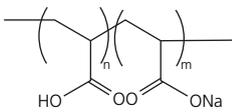
The SAPs range is suitable for applications such as disposable diapers, incontinence pads and sanitary napkins, as well as water-holding agents for the cable industry, construction, packaging, and more.



# Product range selection guide

		Baby diapers	Adult diapers	Sanitary napkins	Incontinence pads	Water blocking agents	Cold storage agents	Calectactory agents	Pet sheets	Air freshening agents (for hot packs)
HI-SWELL™ HS-770	Fairly large particle size for baby diaper	■	■							
HI-SWELL™ HS-1000M	Average size, lower hydrolysis, high gel strength					■	■			
HI-SWELL™ HS-740	Fairly high AUL(Absorbency Under Load)	■	■	■						
HI-SWELL™ HS-701S	High AUL for diaper	■	■	■						■
HI-SWELL™ HS-1000V	General type for diaper	■	■							
HI-SWELL™ HS-300L	Fine particle distribution for diaper	■	■	■						
HI-SWELL™ HS-740S	Fairly high absorbency for diaper	■	■	■						
HI-SWELL™ HS-1500V	Fairly small particle size for baby diaper Faster absorbency	■		■						■
HI-SWELL™ HS-800	Fairly small particle size and high AUL for baby diaper	■		■						
HI-SWELL™ HS-700	Fairly small particle size			■	■					■

■ Recommended  
■ Suitable

		Moisture Content (%)	Retention Capacity (g/g)	Absorbency (g/g)	AUL (0.3psi) (cc/g)
<b>HI-SWELL™ HS-770</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 33	> 55	> 26
<b>HI-SWELL™ HS-1000M</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 15	> 35	> 18
<b>HI-SWELL™ HS-740</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 30	> 50	> 29
<b>HI-SWELL™ HS-701S</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 31	> 50	> 28
<b>HI-SWELL™ HS-1000V</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 33	> 55	> 26
<b>HI-SWELL™ HS-300L</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 35	> 55	> 25
<b>HI-SWELL™ 740S</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 36	> 65	> 21
<b>HI-SWELL™ HS-1500V</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 33	> 55	> 26
<b>HI-SWELL™ HS-800</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 6	> 30	> 48	> 29
<b>HI-SWELL™ HS-700</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW		< 8	> 25	> 40	> 22

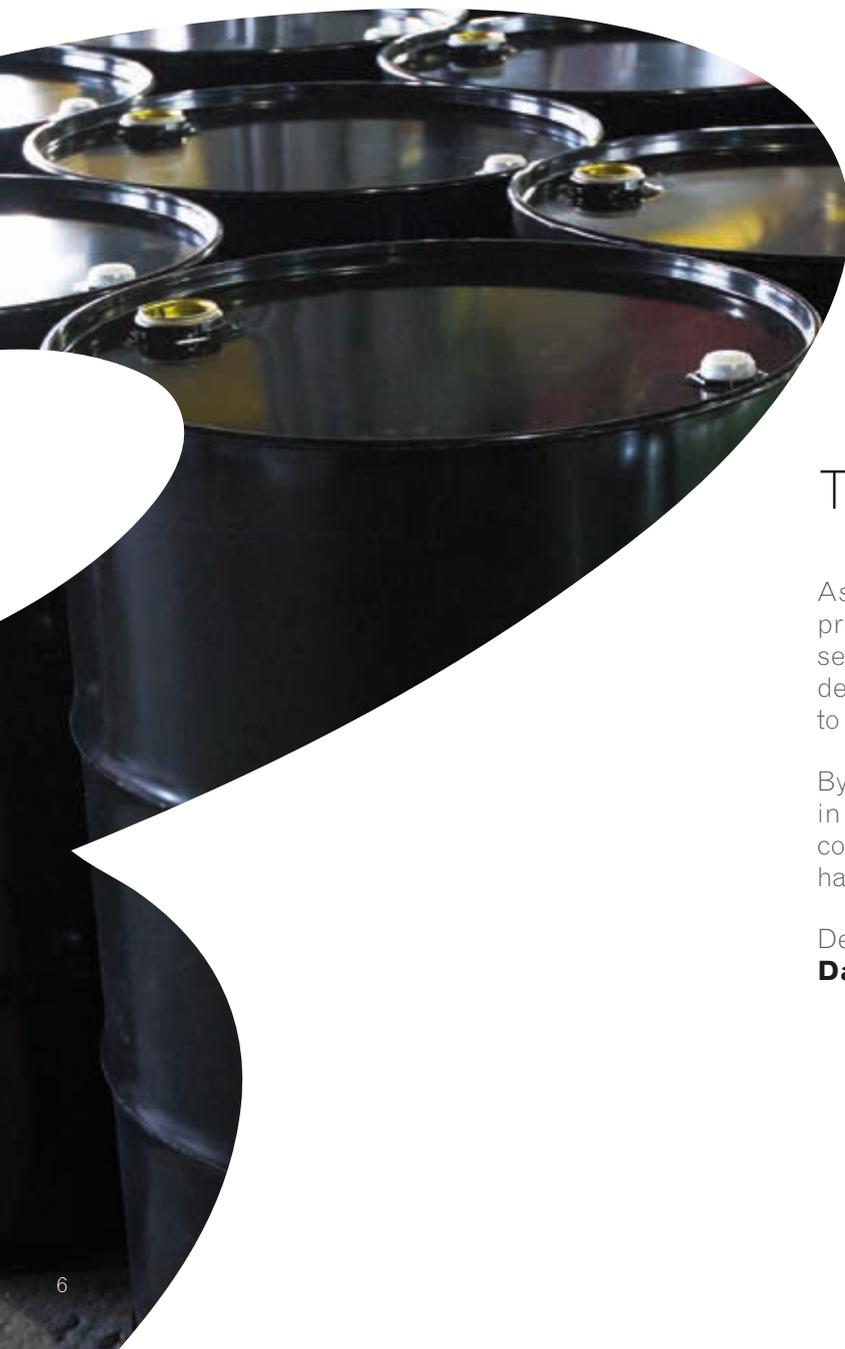
Bulk Density (g/cc)	Residual Monomer (ppm)	Absorbing Speed (sec)	Particle Distribution (%)		
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 > 40 40~65 < 5	<b>HI-SWELL™ HS-770</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.57 ± 0.05	–	–	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 5 < 25 30~80 < 7	<b>HI-SWELL™ HS-1000M</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 25 50~75 < 5	<b>HI-SWELL™ HS-740</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 25 50~75 < 7	<b>HHI-SWELL™ HS-701S</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 25 50~75 < 7	<b>HI-SWELL™ HS-1000V</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 35 60~80 < 5	<b>HI-SWELL™ HS-300L</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 60	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 30 40~70 < 5	<b>HI-SWELL™ 740S</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 35	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 20 70~90 < 7	<b>HI-SWELL™ HS-1500V</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.6 ± 0.05	< 300	< 25	850 µm on 850~500 µm 500~150 µm 150 µm pass	< 2 < 5 80~99 < 7	<b>HI-SWELL™ HS-800</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW
0.56 ± 0.05	< 300	< 20	850 µm on 850~150 µm 150 µm pass	< 1 < 80 < 10	<b>HI-SWELL™ HS-800</b> Sodium polyacrylate, crosslinked CAS NO. 9003-04-7 PW

# Standard Packaging

- **SAPs:** 20 kg Paper Bag  
700 kg Big Bag  
750 kg Big Bag  
800 kg Big Bag

## Key to Abbreviations of Physical Forms

- |                        |                               |                                 |                             |
|------------------------|-------------------------------|---------------------------------|-----------------------------|
| • <b>PW:</b> Powder    | • <b>DW:</b> Dispersion       | • <b>BD:</b> Beads              | • <b>GR:</b> Granule        |
| • <b>SB:</b> Semi Bead | • <b>MB:</b> Micro Beads      | • <b>DF:</b> Dust Free Flow     | • <b>FG:</b> Fine Grind     |
| • <b>SL:</b> Solid     | • <b>FC:</b> Fusion Crystal   | • <b>CP:</b> Crystalline Powder | • <b>VL:</b> Viscous Liquid |
| • <b>FF:</b> Free Flow | • <b>LQ:</b> Liquid or Molten | • <b>PS:</b> Pastilles          |                             |



## Transport and Storage

As a general guideline, we recommend storing the products mentioned in this brochure in their original sealed containers in a cold and dry place. For more detailed information on a specific product, please refer to the corresponding **Technical Data Sheet**.

By law, a number of chemical products must be labeled in respect of transport, storage and handling. Thus corresponding care is a prerequisite for their appropriate handling. Furthermore, local legal regulations may apply.

Detailed information is given in the respective **Safety Data Sheets**.

# About SONGWON Industrial Group

SONGWON, which was founded in 1965 and is headquartered in Ulsan, South Korea, is a leader in the development, production and supply of specialty chemicals.

The second largest manufacturer of polymer stabilizers worldwide, SONGWON operates group companies all over the world, offering the combined benefits of a global framework and readily accessible local organizations.

Dedicated experts work closely together with customers to develop tailor-made solutions that meet individual requirements.

For further information, please go to:  
**[www.songwon.com](http://www.songwon.com)**





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SONGWON provides customers with warranties and representations as to the chemical or technical specifications, compositions and/or the suitability for use for any particular purpose exclusively in individual written agreements.

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