



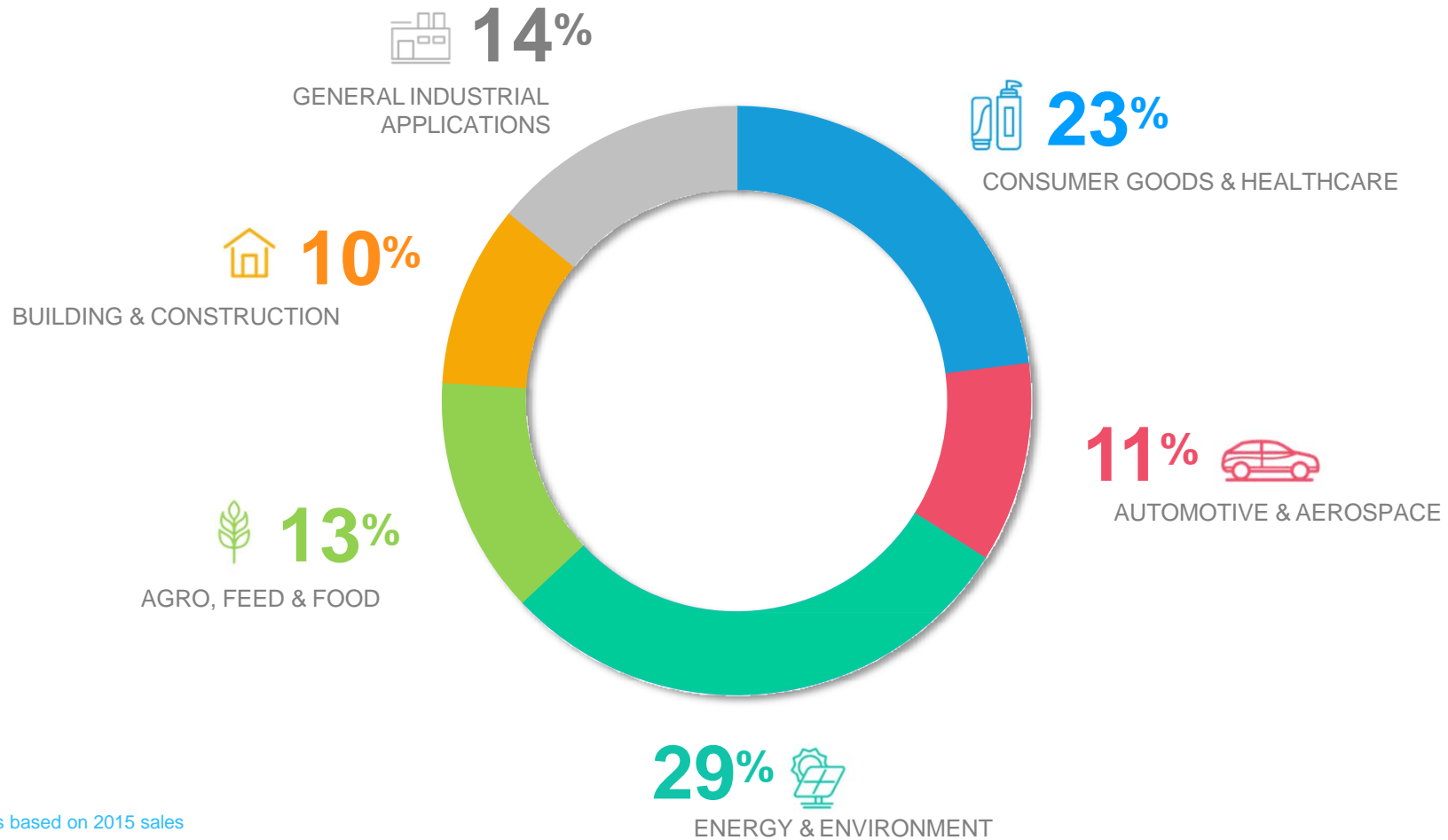
SOLVAY

asking more from chemistry®

Novecare Products for Celulose process

Novecare

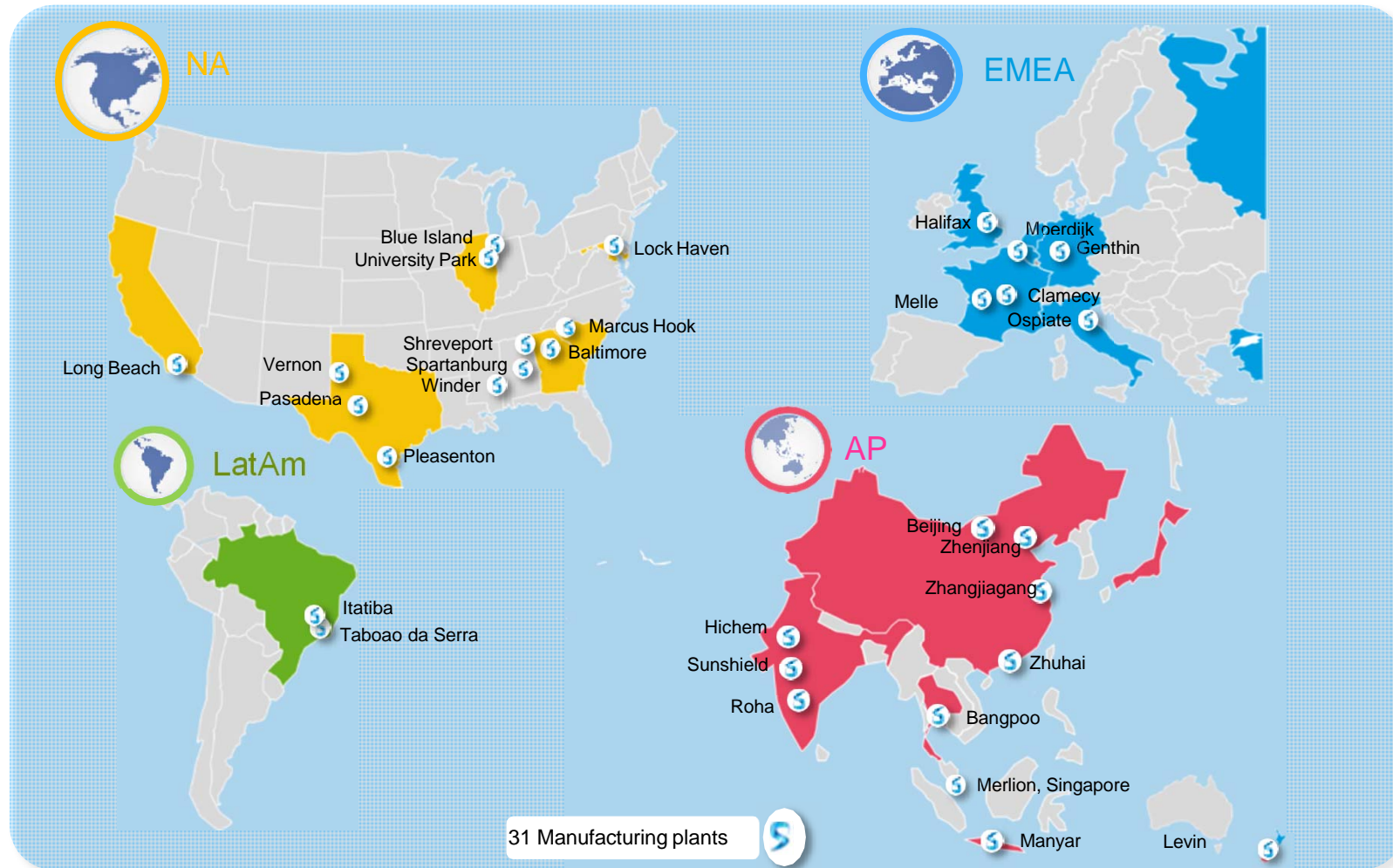
NOVECARE PRODUCT OFFERING FOR THE MOST DEMANDING MARKETS



Estimates based on 2015 sales

Novecare global footprint

We are where CUSTOMERS needs us...



NOVECARE APPLICATIONS

SERVING FOCUSED MARKET SEGMENTS



HPC

- Hair Care
- Body Care
- Skin Care
- Home Care
- Institutional & Industrial



AGRO

- Crop Protection
 - Specialty Surfactants
 - Herbicide Activators
 - Tank Mix
- Plant health
 - Fertilizer Protection
- Seed Care



OIL & GAS

- Drilling
- Cementing
- Stimulation
- Production
- Enhanced Oil Recovery



COATINGS

- Binder Solutions
- Performance Solutions
- Color Solutions








INDUSTRIAL
PROCESS
SOLUTIONS

- Lubricants
- Metal working fluids
- Metal cleaning
- Metal surface treatment
- Plastic additives
- Water treatment
- Textile additives



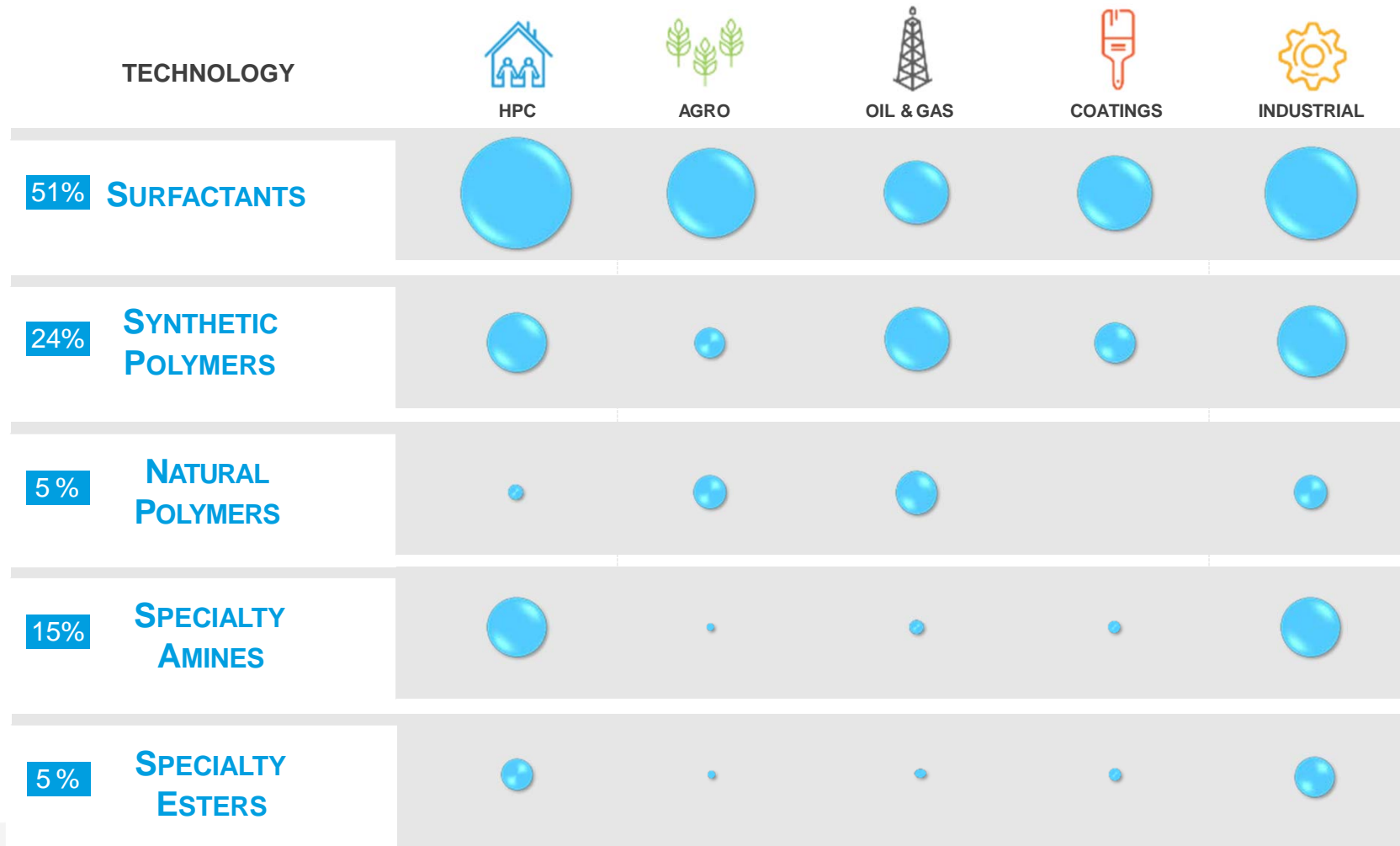
NOVECARE PRODUCT FUNCTIONALITIES

CHEMICALS & SERVICES TO ANSWER UNMET NEEDS

	 HPC	 AGRO	 OIL & GAS	 COATINGS	 INDUSTRIAL PROCESS SOLUTIONS
INTERFACES MANAGEMENT	Foam management Cleaning Soil Release	Long lasting foam	De emulsification	Emulsification Open time/freeze/thaw extender Anti Foam	Lubrication Emulsification Low-foam
SURFACE MODIFICATION	Soil Release Hydrophilisation	Wettability		Adhesion promoters Surfactants	Anti corrosion Adhesion promoters Low-fouling surfaces
FLUID BEHAVIORS	Rheology modifiers	Anti drift Anti rebound	Friction reduction Gelling systems	Rheology technology	Rheology modifiers Gelling agents Anti-settling
DISPERSION & SOLUBILIZATION	Long lasting bacteriostaticity	Active solubilization Fertilizers Protection	Triggered systems Anti scaling Clay dispersion	Pigment wetting & dispersion	Fluidification Dispersants Cleaning

Novecare technologies

Cutting-edge technologies across markets



Case Study

Rhodapon BOS as Bamboo Cooking Agent

Cooking Conditions (蒸煮条件) :

Degree of total alkaline (总碱度) :23%

Degree of vulcanization (硫化度) :19%

Dosage of Rhodapon BOS (加量) : 0.25kg/ton

Customer Spec:10-12

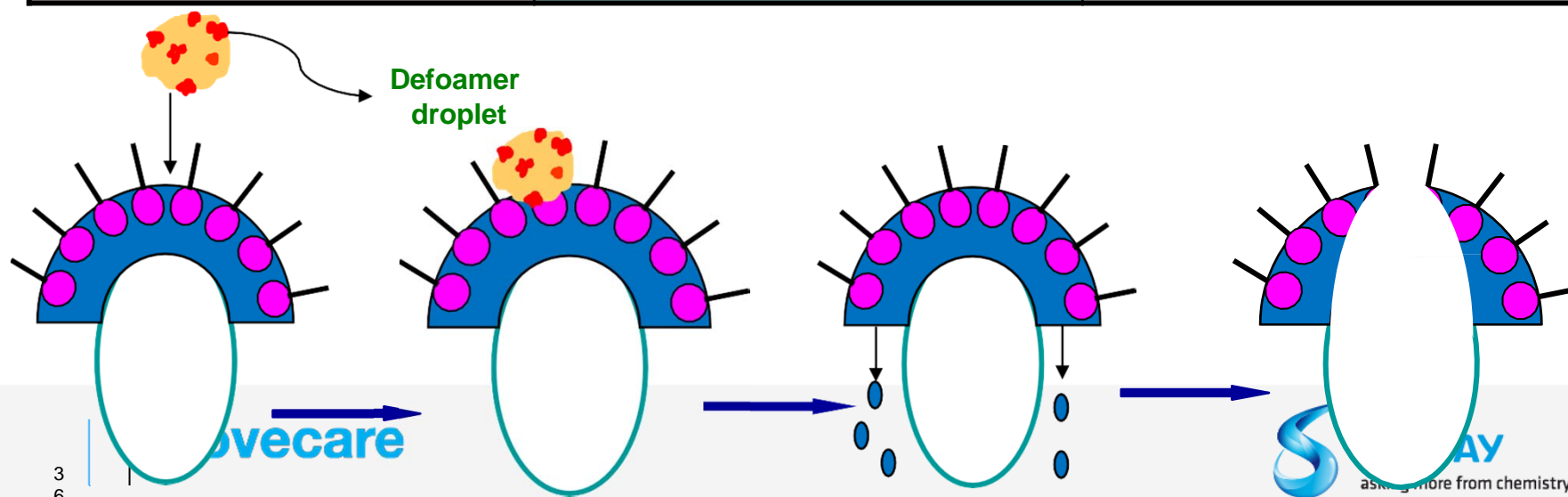
	蒸煮时间 (h:min)	吊包残碱 g/L	吊包 锰值	吊包得 率%	5 KG用 量 残碱g/L	5 KG用 量 锰值	5 KG用 量 4#锰值
Rhodapon BOS	5:20	13.33	14.44	44.93	12.80	13.52	11.61
AQ	6:00	13.02	13.86	43.96	10.97	13.72	11.19

Residual Alkaline: The higher, The better

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Paper size& Press Additives: 涂布助剂

Type	Products	Recommend Dosage (kg/ton)
Defoamer 消泡剂	<i>Rhodoline DF5800</i>	0.6-0.8
	<i>Rhodoline DF642</i>	0.3-0.6
	<i>Rhodoline DF5688</i>	0.3-0.6
Wetting Agents 润湿剂	<i>Geropon CYA75P</i>	0.2-0.8



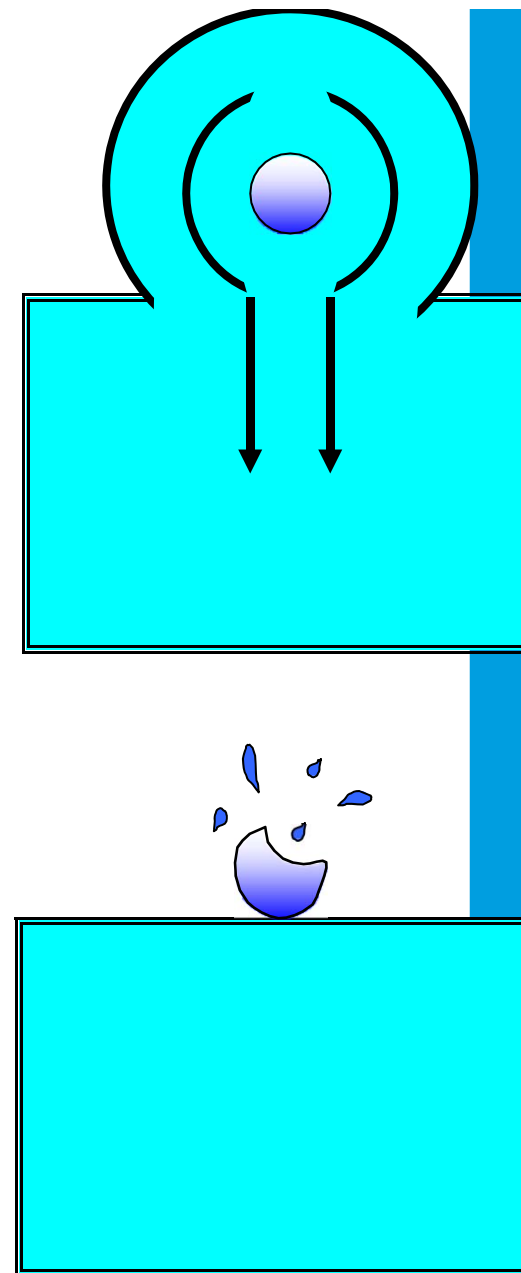
Rhodoline Defoamer specification

- Free silicone, Free APEO
不含硅树脂, 不含烷基酚聚氧乙烯醚
- Easily disperse, Good compatibility
良好的分散性, 和体系相溶性好
- Quickly defoaming, long resistance
消泡迅速, 长效, 持久
- Lower dosage and high cost-effective
用量低, 性价比高

Application Fields:

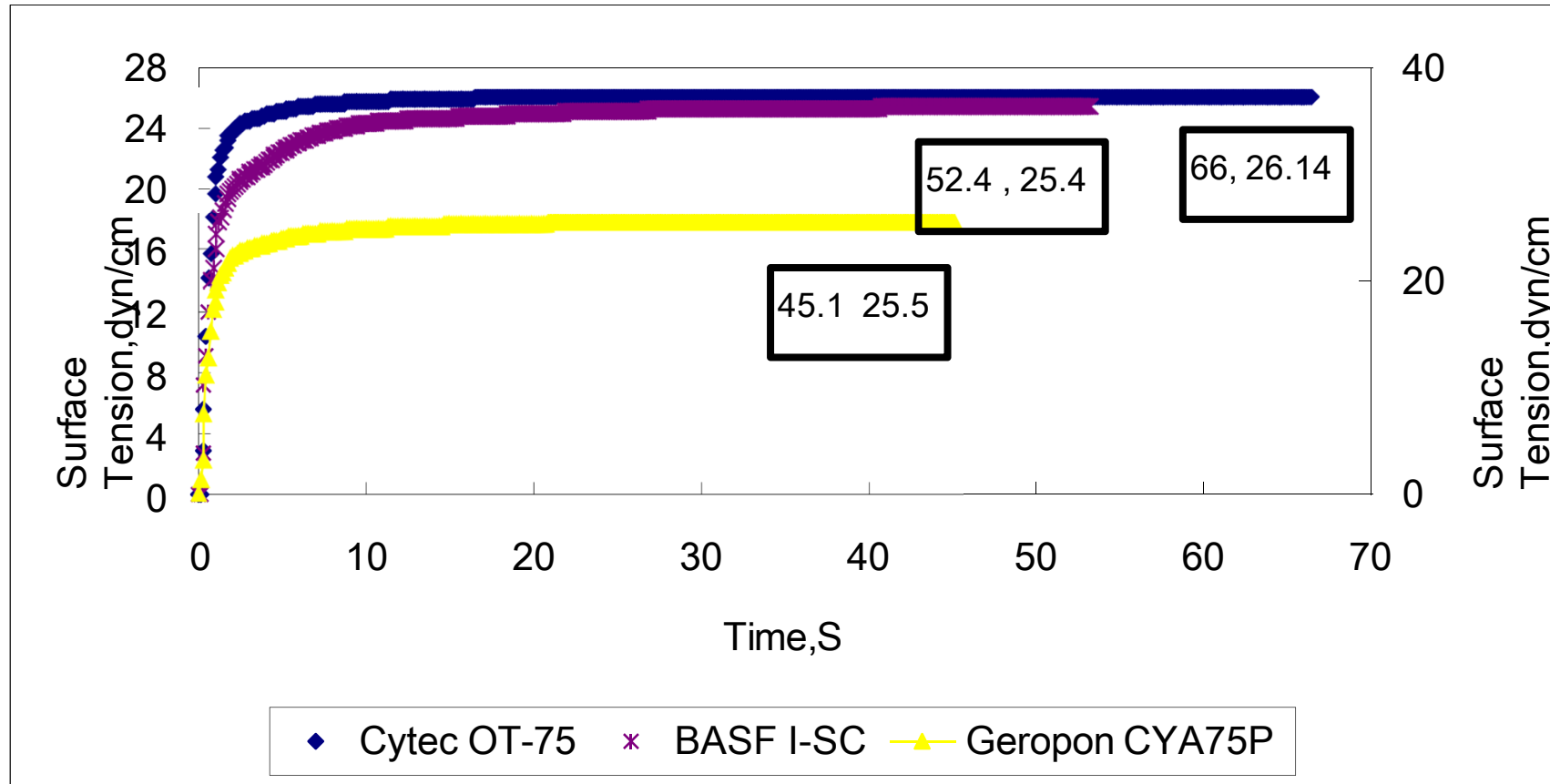
- ✓ Coat of white board: 涂布白板涂料
- ✓ Coat of carbonless copy: 无碳复写涂料
- ✓ Coat of thermal paper: 热敏涂料
- ✓ Coat of craft paper: 涂布牛卡涂料

Novacare



Paper size & Press Additives

Geropon CYA75P Dynamic Surface Tension



Dosage: 6kg/ton in pure acrylic emulsion

Note: The shorter of time dynamic surface tension

balance the better of wetting performance

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Paper Additives---Summary

<i>Paper Additives</i>	<i>Products</i>	<i>Target customers</i>	<i>Recommend dosage(kg/ton)</i>
<i>Cooking Agents</i> 蒸煮	<i>Antarox BL225</i>	<i>CTMP plants</i> 化机浆	<i>0.1-0.4</i>
	<i>Geropon CYA75P</i>		
	<i>Rhodafac PEH</i>		
	<i>Rhodafac PEH</i>	<i>Kraft method pulping plants</i> 碱法制浆 <i>Dissolving pulp plants</i> 溶解浆	<i>0.2-0.4</i>
	<i>Rhodapon BOS</i>		
<i>Deinking Agents</i> 脱墨剂	<i>Rhodaterge DI288</i>	<i>Washing process plants</i> 洗涤	<i>1.0-2.0</i>
	<i>Rhodaterge DI309L</i>	<i>Floation process plants</i> 浮选	<i>0.4-1.5</i>
<i>Defoamers</i> 消泡剂	<i>Rhodoline DF5800</i>	<i>Paper coat plants</i> 造纸涂布	<i>0.6-0.8</i>
	<i>Rhodoline DF642</i>		<i>0.3-0.6</i>
	<i>Rhodoline DF5688</i>		
<i>Wetting Agents</i> 润湿剂	<i>Geropon CYA75P</i>	<i>Coating with base paper or plastic, special papers</i> 塑料涂布和特种纸涂布	<i>0.2-0.8</i>