

*Additives for coatings & Specialty chemicals*

## RHEOLOGICAL ADDITIVES



# ***MONORAL***<sup>®</sup>

As a result of our considerable experience and our co-operation with specialist suppliers of other raw materials and machinery, we offer extensive guidance. Please contact us and we will assist you.



## **AMIDE WAX**

(Anti-sagging, Anti-settling, Thickening agent)



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## COMPANY HISTORY

HSChem is a leading supplier of rheological additives for coatings industry in the world.

Our extensive experience in the field of coating technology and commitment to exceptional quality and customer service has rewarded us with the ISO 9001 certification since 2004.

Our products include anti-sagging agent, anti-settling agent, Defoamer, surface control agent, Metallic orientation agent, matting & slip agents for UV coating and Mar&Abrasion resistance agents for inks and plastic coatings.

HSChem's honest and reliable way of managing good business relationship with our clients has helped us to become a leading rheological producer in the world.

Today, MONORAL is the synonymous with quality additives that dominate the Asian market beyond Korea.

MONORAL additives are being stocked and distributed in more than 68 countries.



*Additives for coatings & Specialty chemicals*

1978	Apr	Company founded by Mr. Hae-Gil, Yang Poly-Olefin wax products started Defoamer for waterbased system started
1989	Dec	Poly-Amide wax product's technical development started
1990	Apr	Poly-Amide wax product's business started
1992	Sep	Overseas marketing started
1997	Jul	Company becomes incorporated
2000	Jul	Received quality certification from International Paint (Akzo Nobel-UK)
2001	Jun	Opened new factory and R&D center Restructured as HS Chem Co.,Ltd
2004	Mar	Acquired ISO 9001 Certification
	Mar	Constructed 2nd Plant and started its operation
	Nov	Received an Award for "The Prize of Export Tower" from KITA (1 million USD)
2005	Nov	Received an Award for "The Prize of Export Tower" from KITA (3 million USD)
2007	Nov	Received an Award for "The Prize of Export Tower" from KITA (5 million USD)
2008	Nov	Pre-registration EU-REACH, participated in 'China Coat 2008' (Guangzhou)
2009	Nov	Participated in 'China Coat 2009' (Shanghai)
2010	Nov	Participated in 'China Coat 2010' (Guangzhou)
2011	Nov	Participated in 'China Coat 2011' (Shanghai)
2012	Nov	GRAND PRIZE From GIMPO CITY (Oversea Market Development part)
2013	Nov	The Prize of Export Tower from KITA (10 Million USD)
2014	Mar	Expend Main plant and new Technical Development Center setting up
2016	Aug	3rd Factory plant open
2017	Apr	1st Factory site equipment overhaul & new product develop
2017	May	Acquired PSM (Process Safety Management) Certificate
2020	Jun	Network of logistic hub in Europe (Amsterdam)
2020	Oct	4th Logistic center open
2021	Dec	Received an Award from Ministry of Trade, Industry and Energy



## What's AMIDE WAX?

### Amide Wax Form

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**MONORAL** is an unique synthetic amide wax applicable to a wide range of solvent base synthetic resin coatings and develops an exceptionally strong and long lasting thixotropic structure

### Amide Wax Characters

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Amide Wax	Anti-sagging
Medium viscosity	
Anti- sagging (main)	
Anti-settling	
Anti-hard caking	
Thickening	
Increase viscosity	
PA-Structure : Sharp needle, Net	
Incorporation : High speed mixing	

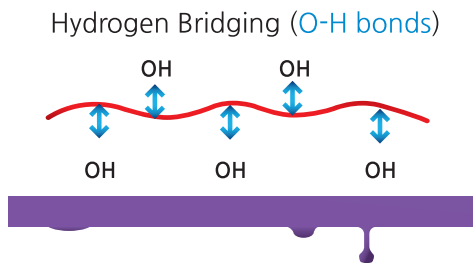
## Amide Wax Structure



Sharp needle and Net structure and develops an exceptionally strong and long lasting thixotropic performance

그물망 구조로 칙소성 부여

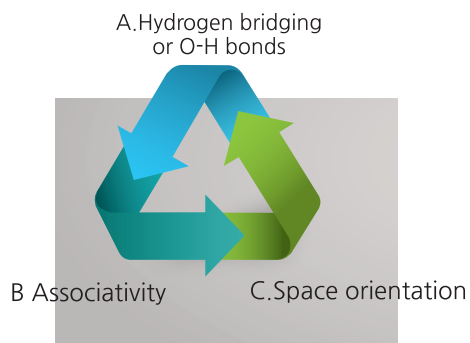
## Hydrogen Bridging (O-H Bonds)



A hydrogen bond is the electrostatic attraction between two polar groups that occurs when a hydrogen (H) atom covalently bound to a highly electronegative atom such as oxygen (O) experiences the electrostatic field of another highly electronegative atom nearby

수소 결합

## Rheology Mechanism



Rheology system remains in full force and effect by reciprocal action of O-H Bonds, Associativity and Space orientation

공간 정렬로 상호작용

## AMIDE WAX : Anti-sagging, Anti-settling, Thickening Agent

MONORAL is an unique synthetic amide wax applicable to a wide range of solvent base synthetic resin coating and develops an exceptionally strong and long lasting thixotropic structure

### • Amide Wax Paste

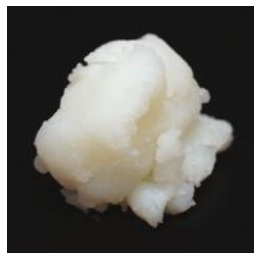
PRODUCT	SOLID	COMPOSITION	VOLATILE	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL 3300Z	20% Paste	Amide	Xylene Ethanol	1-5%	Heavy duty coating For high build coating Higher thixotropy than MONORAL 3300	Let down Post addition	REACH KECL
MONORAL 3300H	20% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL 3300K	20% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL 3300	20% Paste	Amide	Xylene Ethanol	1-5%	Heavy duty coating Architectural coating Industrial coating	Let down Post addition	REACH KECL
MONORAL 3300M	20% Paste	Amide	Xylene Ethanol	1-5%	Architectural coating Industrial coating	Let down Post addition	REACH KECL
MONORAL 3300S	20% Paste	Amide	Xylene Ethanol	1-5%	Architectural coating Wood coating	Let down Post addition	REACH KECL
MONORAL 3300E	20% Paste	Amide	Xylene Ethanol	1-5%	Industrial coating	Let down Post addition	REACH KECL
MONORAL 3300R	20% Paste	Amide	Xylene IPA	1-5%	Heavy duty coating Architectural coating Industrial coating	Let down Post addition	REACH KECL
MONORAL 5500	15% Paste	Amide	Xylene Ethanol	1-5%	Architectural coating	Let down Post addition	REACH KECL

#### Packing Style



17kg/pail can

#### Product image



#### Transport Information



- Dangerous Goods
- Class 4.1 (Flammable solids)
- UN No : 1325

- 위험물 안전관리법 : 제2류 인화성고체

## PREMIUM AMIDE WAX :

### Anti-sagging, Anti-settling Agent for OEM, Car refinish, Wood coating

This is a high performance amide wax applicable to most of solvent based synthetic resin coatings and develops an exceptionally strong and durable thixotropic structure.

#### • Premium Amide Wax Paste

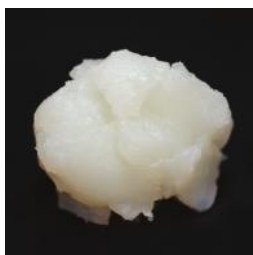
PRODUCT	SOLID	COMPOSITION	VOLATILE	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL AF3500	20% Paste	Amide	Xylene	1-5%	Urethane coating Alcohol free type	Let down Post addition	REACH KECL
MONORAL AF3510	10% Paste	Amide	Xylene	1-5%		Let down Post addition	REACH KECL
MONORAL ED	20% Paste	Amide	Xylene Ethanol	1-5%	Wood coating Plastic coating Car coating	Let down Post addition	REACH KECL
MONORAL ED-10X	10% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL SD	20% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL SD-10X	10% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL LD	20% Paste	Amide	Xylene Ethanol	1-5%	Low tem, dispersing	Let down Post addition	REACH KECL
MONORAL LD-10X	10% Paste	Amide	Xylene Ethanol	1-5%	Low tem, dispersing	Let down Post addition	REACH KECL
MONORAL RD	20% Paste	Amide	Xylene IPA	1-5%	Wood coating Plastic coating Car coating	Let down Post addition	REACH KECL
MONORAL GD	20% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL
MONORAL GD-10X	10% Paste	Amide	Xylene Ethanol	1-5%		Let down Post addition	REACH KECL

#### Packing Style



15kg/pail can

#### Product image



#### Transport Information



- Dangerous Goods
- Class 4.1 (Flammable solids)
- UN No : 1325

- 위험물 안전관리법 : 제2류 인화성고체

## ECO-FRIENDLY AMIDE WAX :

### Anti-sagging, Anti-settling Agent for Eco-friendly coating system

This product is an ecofriendly version of rheological additive which is the newest enhancement of amide wax It is applicable to low toxic solvent systems which is not associated with B.T.X (Benzene group) or applicable to most of aliphatic solvent based synthetic resin coatings

PRODUCT	SOLID	COMPOSITION	VOLATILE	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL NT3300	20% Paste	Amide	Light Aromatic Ethanol	1-5%	Industrial coating	Let down Post addition	REACH KECL
MONORAL NT3310	10% Paste	Amide	Light Aromatic Ethanol	1-5%	Metallic coating	Let down Post addition	REACH KECL
MONORAL NT3600	20% Paste	Amide	Light Aromatic N-Butanol	1-5%	Metallic coating	Let down Post addition	REACH KECL
MONORAL NT3610	10% Paste	Amide	Light Aromatic N-Butanol	1-5%	Metallic coating	Let down Post addition	REACH KECL
MONORAL BA3400	20% Paste	Amide	N-Butyl Acetate Ethanol	1-5%	Architectural coating	Let down Post addition	REACH KECL
MONORAL BA3410	10% Paste	Amide	N-Butyl Acetate Ethanol	1-5%	Wood coating Plastic coating	Let down Post addition	REACH KECL
MONORAL BA3500	20% Paste	Amide	N-Butyl Acetate N-Butanol	1-5%	Architectural coating	Let down Post addition	REACH KECL
MONORAL BA3510	10% Paste	Amide	N-Butyl Acetate N-Butanol	1-5%	Wood coating Plastic coating	Let down Post addition	REACH KECL
MONORAL BZ3530	30% Paste	Amide	Benzyl alcohol	1-5%	Heavy duty coating	Grind with Mill base	REACH KECL
MONORAL BZ3520	20% Paste	Amide	Benzyl alcohol	1-5%	Heavy duty coating	Let down Post addition	REACH KECL
MONORAL SF3620	80% Paste	Amide	Benzyl alcohol Nonreactive thinner	1-5%	Heavy duty coating Industrial coating	Let down Post addition	KECL

PRODUCT	SOLID	COMPOSITION	VOLATILE	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL A660-10M	10% Paste	Amide	Mineral Spirits Benzyl alcohol	1-6%	Industrial coating Architectural coating	Let down Post addition	REACH KECL
MONORAL A670-20M	20% Paste	Amide	Mineral Spirits Benzyl alcohol	1-3%	Decorative coating Wood stains coating	Let down Post addition	REACH KECL
MONORAL A670-10M	10% Paste	Amide	Mineral Spirits Benzyl alcohol	1-6%	Heavy duty coating Industrial coating	Let down Post addition	REACH KECL
MONORAL A680-20M	20% Paste	Amide	Mineral Spirits Benzyl alcohol	1-3%	Industrial coating Decorative coating	Let down Post addition	REACH KECL
MONORAL A680-10M	10% Paste	Amide	Mineral Spirits Benzyl alcohol	1-6%	Industrial coating Decorative coating	Let down Post addition	REACH KECL

#### Packing Style



15kg/pail can

#### Product image



#### Transport Information



- Dangerous Goods
- Class 4.1 (Flammable solids)
- UN No : 1325

• 위험물 안전관리법 : 제2류 인화성고체

## Poly Amide Rheology Agent (Water-borne) 수용성 아마이드계 레올로지 조정제

This product is polyamide based rheology control agent for water-borne systems. Unlike conventional thickeners, it provide strong chemical interaction in water-borne system, particularly with resins. And It provide excellent anti-sagging and anti-settling with pigment and flip-flop performance.

본 제품은 수용성 시스템에서 사용하는 기능성 아마이드계 레올로지 조정제입니다. 기존의 수성증점제와 달리 본 제품은 수성 시스템, 특히 수지와 강한 화학적 상호 작용을 제공합니다. 자동차용 및 플라스틱용 도료에 중요한 안료의 정렬 orientation 및 flip-flop 성능개선으로 탁월한 휘도와 광택을 내도록 도움을 주며, 주기능인 도막의 흐름 방지 및 안료의 침강 방지 기능을 완벽히 제공합니다.

### • Poly Amide Rheology Control Agent

PRODUCT	SOLID	COMPOSITION	VOLATILE	LEVEL	APPLICATION	CONDITION	SYSTEM		
MONORAL HR-200	20% Paste	Amide salt of Polyamide Wax	Water / PGME	2-7%	Emulsion Alkyd Acrylic Polyurethane PU dispersion 2K polyurethane 2K epoxy UV curing	Co-solvent rich, Solvent system Low-molecule polymer system	Water-borne system		
MONORAL HR-218	18% Paste			2-7%			Water-borne system		
MONORAL HR-215	15% Paste		Water / PGBE	2-7%			Water-borne system		
MONORAL HR-300	20% Paste	Amide salt of Polyamide Wax	Water / PGME	1-5%			Emulsion Alkyd Acrylic Polyurethane PU dispersion 2K polyurethane 2K epoxy UV curing	Co-solvent rich, Solvent system Low-molecule polymer system	Water-borne system
MONORAL HR-318	18% Paste			1-5%					Water-borne system
MONORAL HR-315	15% Paste		Water / PGBE	1-5%					Water-borne system
MONORAL HR-400A	20% Paste		Amide salt of Polyamide Wax	Water / PGME					1-5%
MONORAL HR-415A	15% Paste	1-5%							Water-borne system

Packing Style



Product image



Transport Information

- Non-Dangerous Goods
- Class : N/A
- UN Number : N/A
- 위험물 안전관리법 : 해당 없음

## AMIDE WAX POWDER : Anti-sagging, Anti-settling, Thickening Agent

MONORAL is innovation of high performance micronized amide wax powder specially designed for heavy duty protective coatings and ambient curing solvent based epoxy coatings to provide excellent recoat ability.

### • Micronized Modified Castor Oil Derivate

PRODUCT	SOLID	COMPOSITION	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL 8500	100% Powder	Modified castor oil Hydrogenated castor oil wax	0.2~2%	UPE, Decorative, Sealants Solder pastes, Ink General Industry	Grind with Mill base (50~75°C)	REACH KECL
MONORAL 8600	100% Powder	Castor oil derivate Hydrogenated castor oil wax	0.2~2%	Decorative, Sealants Solder pastes, Ink General Industry	Grind with Mill base (43~55°C)	REACH KECL

### • Micronized Amide Wax Powder

PRODUCT	SOLID	COMPOSITION	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL 8800	100% Powder	Micronized amide wax	0.2~2%	High solid system (Normal Ver.)	Grind with Mill base (55~70°C)	REACH KECL
MONORAL 8800K	100% Powder	Micronized amide wax	0.2~2%	High solid system (Normal Ver.)	Grind with Mill base (55~70°C)	REACH KECL
MONORAL 8800F	100% Powder	Micronized amide wax	0.2~2%	High solid system (Normal Ver.)	Grind with Mill base (55~70°C)	REACH KECL
MONORAL 8900	100% Powder	Micronized amide wax	0.2~2%	High solid system (Normal Ver.)	Grind with Mill base (55~75°C)	REACH KECL
MONORAL 9000	100% Powder	Micronized amide wax	0.2~2%	High solid system (Strong Ver.)	Grind with Mill base (50~70°C)	REACH KECL
MONORAL 9200	100% Powder	Micronized amide wax	0.2~2%	High solid system Solvent Free system	Grind with Mill base (40~70°C)	REACH KECL

Packing Style



Product image



Transport Information

- Non-Dangerous Goods
- Class : N/A
- UN Number : N/A
- 위험물 안전관리법 : 해당 없음

## AMIDE WAX POWDER : Anti-sagging, Anti-settling, Thickening Agent

This is a special rheology modifier suitable for a wide range of solvent-based, high-solid and solvent-free applications. It Imparts shear thinning rheology with thixotropic viscosity Also, it enhances an excellent sag-resistance and anti-settling performance.

### • Micronized Amide Wax Powder

PRODUCT	SOLID	COMPOSITION	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL 8700	100% Powder	Micronized amide wax	0.2-2%	Solvent free system	Grind with Mill base (55 ~ 65°C)	REACH KECL
MONORAL 8700SR	100% Powder	Micronized amide wax	0.2-2%	Solvent free system	Grind with Mill base (50 ~ 60°C)	REACH KECL
MONORAL 8720SR	100% Powder	Micronized amide wax	0.2-2%	Solvent free system	Grind with Mill base (50 ~ 60°C)	REACH KECL

### • Rheology Modified Amide Wax Powder

PRODUCT	SOLID	COMPOSITION	LEVEL	APPLICATION	CONDITION	REGULATION
MONORAL RM-2	100% Powder	EBS wax	0.2-2%	Rubber, Plastic, Lubricant	Grind with Mill base (50 ~ 80°C)	KECL
MONORAL RM-3	100% Powder	Micronized amide wax	0.2-2%	Lubricant, Sealant	Grind with Mill base (50 ~ 80°C)	REACH KECL
MONORAL RM-4	100% Powder	Micronized amide wax	0.2-2%	Sealant, Adhesives	Grind with Mill base (50 ~ 80°C)	REACH KECL
MONORAL RM-5	100% Powder	Micronized amide wax	0.2-2%	Coatings, Adhesive	Grind with Mill base (50 ~ 80°C)	REACH KECL
MONORAL RM-6	100% Powder	Micronized amide wax	1-5%	Alcohol, Polar system	Grind with Mill base (50 ~ 80°C)	REACH KECL
MONORAL RM-7	100% Powder	Micronized amide wax	0.2-2%	Sealant, Adhesives	Grind with Mill base (50 ~ 80°C)	REACH KECL
MONORAL RM-8	100% Powder	Micronized amide wax	0.2-2%	Sealant, Adhesives	Grind with Mill base (50 ~ 80°C)	REACH KECL

Packing Style



Product image



Transport Information

- Non-Dangerous Goods
- Class : N/A
- UN Number : N/A
- 위험물 안전관리법 : 해당 없음

## PRODUCT APPLICATION RANGE

### • Marine Coatings / Heavy duty Coatings

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- **3300K** : Ballast and Cargo Tank
- **3300M** : Hull
- **3300** : General heavy duty coating



- **AF3500** : Alcohol Free System\*  
Epoxy, Urethane System
- **A670-20M** : High Flash Point Coating System



- **8800 / 8900 / 9000** : High Solid System(NV 70%)
- **8700 / 8700SR** : Solvent Free System
- **9200** : High Solid System (NV 80-85%)  
Solvent Free System

### • Industrial Coatings

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- **3300** : Solvent Based Epoxy Primer &  
Polyester Top Coating, Industrial coating
- **SF3620** : BTX Free System



- **BA3400** : Low Toxic System
- **NT3300** : Low Toxic System
- **A680-20M** : Low Toxic System

• **Architecture Coatings**



**- 3300M**

: Applicable to a Wide Range of Resins

**- 5500**

: Easy Dispersing to Architectural Coating

**- AF3510**

: Alcohol Free System, 2K Urethane Coating

**- NT3300, NT3600**

: Low Toxic System

• **Wood, Plastic and UV Coatings**



**- ED / SD**

: Easy Dispersing to Wood and Plastic Top Coating

**- GD**

: Super Dispersing to Car coating and Plastic Top Coating

**- 3300S**

: Primer Coating to a Wide Range of Resins

**- HR-200 / HR-300**

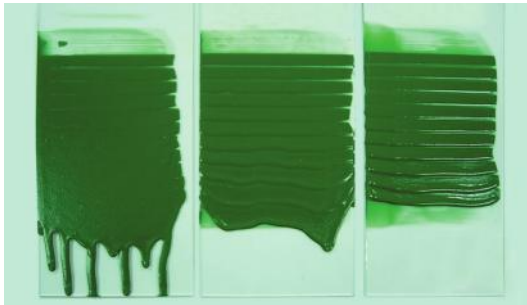
: Water-borne System



## Technical Info. No.1

## Amide Wax Paste

### • Anti-Sagging Test



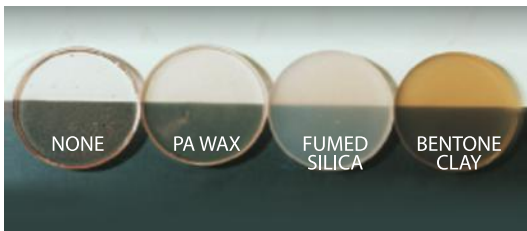
FUMED SILICA 350µm vs BENTONE CLAY 500µm vs POLY AMIDE 750µm

■ **Anti-Sagging Test** Lab Equipment  
 : [ANTI-SAG METER ASM-3] and [GLASS PLATE]  
 - LENETA ANTI-SAG METER HIGH RANGE (Germany)

1. RESIN : Epoxy resin (paint)
2. 95%(Resin) + 5%(Additive)
3. Run a dissolver at 1500rpm for 20minutes
4. Added curing agent (A Mixture Ratio = 85:15)
5. Thinning : 10%

아마이드 왁스는 유사계열에 비하여 우수한 흐름방지를 부여함

### • Gloss Test



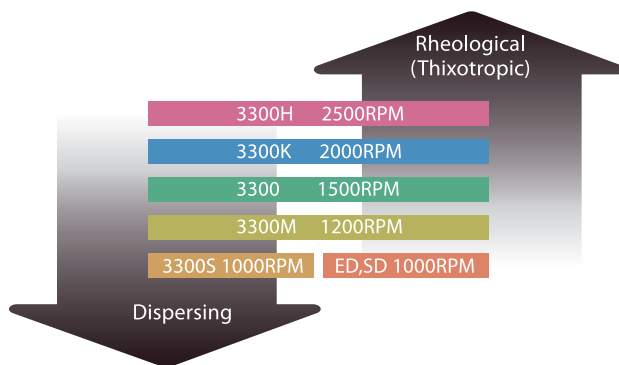
By acrylic resin base

Fumed Silica used to hazy and Bentone Clay is yellowing on the color

But Amide wax is minimum affected on color and gloss in the coatings

아마이드 왁스는 유사계열에 비하여 광택에 영향을 최소화 함

### • Anti-sagging Power & Mix speed



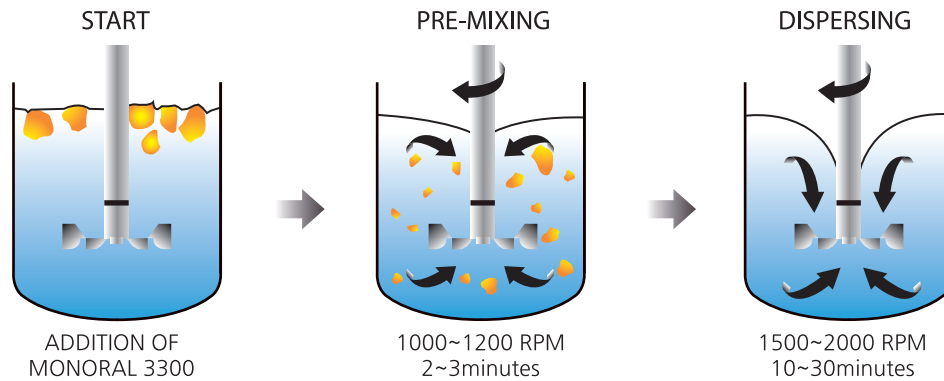
From 3300S to 3300H, the rheological performance is rising

From 3300H to 3300S, the dispersing is easier

3300H로 갈수록 척소성이 상승

3300S로 갈수록 분산성이 좋음

## Amide Wax Incorporation



- Freely applicable to addition in premix or post-addition in the formulation.
- Recommended specification is  
Pre-mixing 2~3 mins at 1,000~1,200rpm  
Then dispersing 30 mins at 1,500~2,000rpm

- 본 제품은 전첨가와 후첨가가 가능합니다.
- 교반시 1,000~1,200rpm으로 2~3분 가량 저속교반후 1,500~2,000rpm으로 최소 30분 분산하십시오.
- 안료와 함께 교반하는 것이 보다 좋은 왁스의 입도를 얻을 수 있습니다.

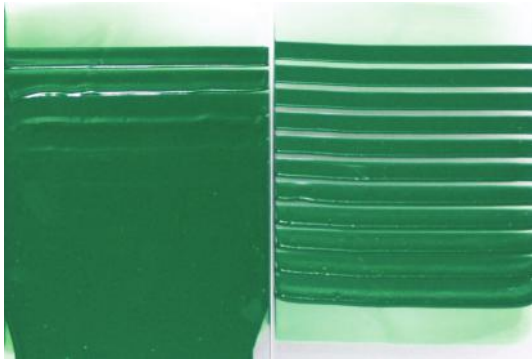
## Caution

- Must Use disk or Cowles type of dissolver (Do not use impeller types)
  - Must be taken to avoid overgrinding and overheating as this will break amide net structure and cause reduced performance.
  - In winter season, the dispersing performance could be decreased and it would cause seeding problems, therefore it muse store in warm place before use
- 
- 고속 믹싱이 불가능 할 경우 겔상태로 만들어 입도 검사 후 첨가하고 겔 보관은 겔을 만드신 후 최대3주 안에 사용하십시오
  - 강한 전단력의 분산기계 또는 장시간의 분산시간 혹은 반복분산은, 제품의 주요성분인 아미이드의 요변 구조를 파괴 할 수 있으니 주의바랍니다
  - 영하의 동절기에서는 본 아미이드계 제품은 분산성이 떨어져 도료의 입도에 문제를 야기 할 수 있습니다. 동절기에는 따뜻한 곳에 보관하시거나 또는 항온실에 설정온도 50℃/12시간 보관 후 사용하시는 것이 좋습니다.

## Technical Info. No. 2

## Amide Wax Powder

### • Anti-Sagging Test



NO ADDITIVE 350 $\mu$ m

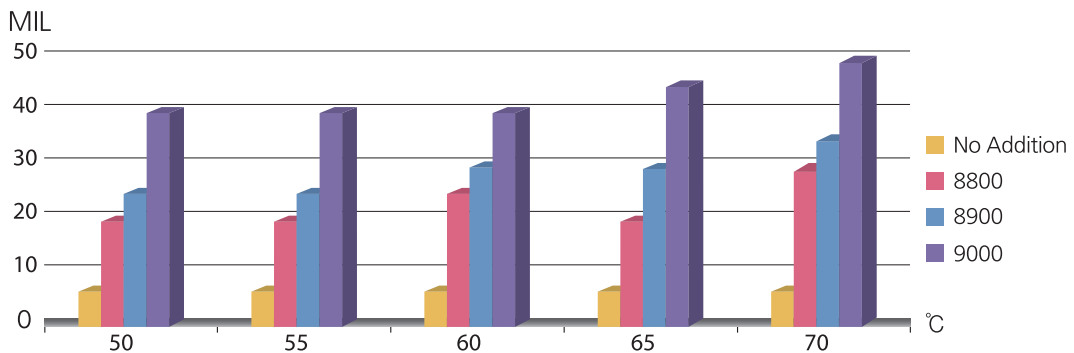
1% ADDITIVE 1000 $\mu$ m

- **Anti-Sagging Test** Lab Equipment  
: [ANTI-SAG METER ASM-3] and [GLASS PLATE]  
- LENETA ANTI-SAG METER HIGH RANGE(Germany)

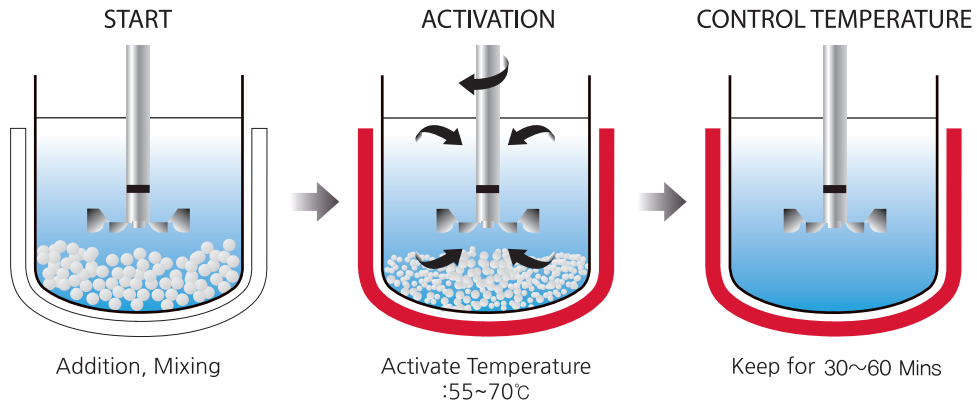
1. RESIN : High build Epoxy resin
2. 98% (Resin) + 1% (Additive) + 1% (Xylene)
3. Run a dissolver at 2000rpm for 60minutes  
Keep temperature until 55°C and then OVERNIGHT
4. Added curing agent (A Mixture Ratio = 85:15)
5. Thinning : 5%
6. Sag Meter Test : MONORAL 9000

### • Thickness Index on Production Temperature

- Test Condition : Epoxy resin  
Extender  
Additives : MONORAL 8800, 8900 and 9000 1% (wt%)  
Solvent : Ketone, Alcohol, Aromatic hydrocarbon  
Hardener : Modified aliphatic polyamine, Polyamide  
Solvent : Ketone, Alcohol, Aromatic hydrocarbon
- Activation Condition : Act. temp: ①50°C ②55°C ③60°C ④65°C ⑤70°C  
Act time: 30mins
- Test items : Viscosity  
T.F (Thixotropic factor) : Vis (6rpm/60rpm) after mixture  
Sagging property : No thinning  
1 Mil = 25.4  $\mu$ m



## Amide Wax Powder Incorporation



High speed disperser is recommended for incorporating along with appropriate level of shear, time, and temperature

Machine: High speed dissolver

Temperature range: 55℃ ~ 70℃

Processing time: 30~60 Mins  
(keep the temperature)

- 첨가 방법 : 전/후 첨가 가능
- 첨가 방법 : 디스크형 고속 교반기
- 사용 방법 : 고속교반 후 적정온도에서 서서히 교반
- 활성온도 : 55 ~ 70℃ 추천
- 분산시간 : 약30~60분 유지

## Caution

- **Must keep the temperature for 30~60 Mins to activate**

Appropriate level of shear, time, and temperature is very important

- 전 첨가와 후 첨가가 자유로우나 적정 온도가 부여되면 왁스가 활성화 되기 때문에 적정온도의 유지가 반드시 필요합니다.
- 기재된 정보는 사용시 권장사항으로 추천하지만, 보증하는 것은 아니므로 충분히 실험한 후 사용하십시오.

# Shipment Info.



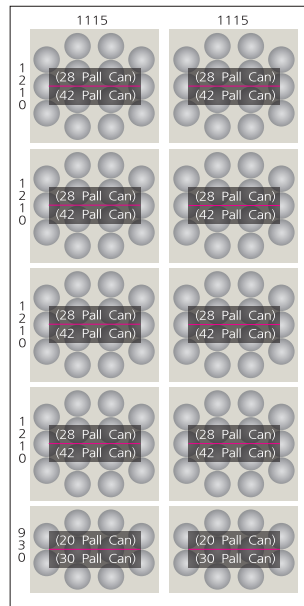
## Product : Amide Wax Series

### Packing Style



17kg/pail can

### Packing on 20" full container



### Description

<b>20" FCL</b>	<b>Total 660 cans</b>
----------------	-----------------------

8 Pallet X 42 cans = 336 cans

8 Pallet X 28 cans = 224 cans

2 Pallet X 30 cans = 60 cans

2 Pallet X 20 cans = 40 cans

<b>20" HCL</b>	<b>Total 396 cans</b>
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8 Pallet X 42 cans = 336 cans

2 Pallet X 30 cans = 60 cans

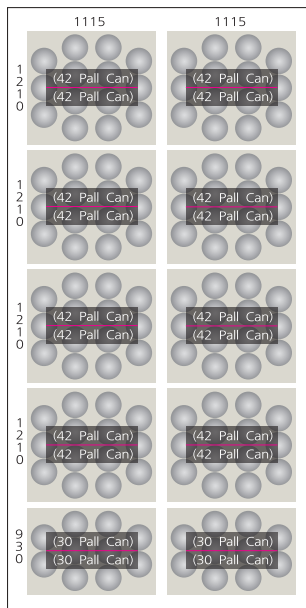
**Product : Premium Amide wax, Eco-friendly Amide Wax Series**

**Packing Style**



15kg/pail can

**Packing on 20" full container**



**Description**

**20" FCL** Total 792 cans

16 Pallet X 42 cans = 672 cans

4 Pallet X 30 cans = 120 cans

**20" HCL** Total 396 cans

8 Pallet X 42 cans = 336 cans

2 Pallet X 30 cans = 60 cans

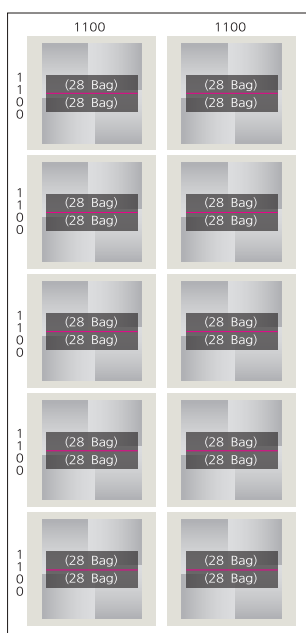
**Product : Micronized amide wax powder Series**

**Packing Style**



15kg/paper bag

**Packing on 20" full container**



**Description**

**8600**

**20" FCL** Total 400 bags

20 Pallet X 20 bags = 400 bags

**8500 / 8700 / 8800 / 9000**

**20" FCL** Total 560 bags

20 Pallet X 28 bags = 560 bags



additives for coatings @ specialty chemicals





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**HS CHEM CO.,LTD.**

**Head Office / R&D Center**

50, Hagungondan-ro, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

Tel: +82-31-982-3263 / Fax: +82-31-982-5580 / Email: [monoral@hschem.co.kr](mailto:monoral@hschem.co.kr)

**Factory 1** 41, Hagungondan-ro, Yangchon-eup, Gimpo

**Factory 2** 50, Hagungondan-ro, Yangchon-eup, Gimpo

**Factory 3** 47, Hagungondan-ro, Yangchon-eup, Gimpo