



Additives That Matter



Introduction:

IRRH Specialty Chemicals India Limited has been producing plastics additives, lubricants and releasing agents with its indigenous technology and has been leading the specialty chemical market with its superior technical expertise.

Based on accumulated technical expertise and excellent research capability, we are creating new products for the 21st century. We always strive to provide our customers complete satisfaction and try to impress them with our innovative products and services, at all times. We, research and develop novel products and technology continuously. Also we promise to develop and provide quality solutions for your additive queries always.

With technical expertise from Irrh Specialty Chemicals Co. Ltd, S.Korea,

Irrh Specialty Chemicals India Limited was founded in January 2010.

Irrh Specialty Chemicals India Limited established its new manufacturing facility for Metallic Stearates, Polyamide waxes, PE Waxes and Oxidized PE waxes in Abu Road, Rajasthan, India in January 2012.



The Products :

1. Zinc Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (Mesh)
ISC-500F	116-125	10.4-11.4	Max 0.5	Max 0.5	0.2-0.3	500 Mesh -99% Pass
ISC-1000	116~125	10.4~11.4	Max 0.5	Max 0.5	0.20~0.03	350 Mesh - 99% Pass
ISC-500	116~125	10.4~11.4	Max 0.5	Max 0.5	0.20~0.03	325 Mesh - 99% Pass
ISC-400	116~125	10.4~11.4	Max 0.5	Max 0.5	0.20~0.03	325 Mesh -99% Pass
ISC-350	116-125	10.4-11.4	Max 1	Max 0.5	0.2-0.3	350 Mesh - 99% Pass

Environment: Biodegradable.

Toxicity: Zinc Stearate is non-toxic as per the following reference:
(U.S.A) FDA Title 21CFR 175.300-177.2600-182.8994
(EEC) Commission directive 90/128/EEC and further amendments.

Applications:

PVC Stabilizer	Synergic Stabilizer for Ba/Cd & Ca-Zn Stabilizer systems
Paint Industry	All Types of Sealer
Rubber, Polyurethane, Polyester Industry	Metal Release Agent
Playing Cards Industry	To Reduce Friction between Cards
Cosmetic Industry	Lubricant to Improve Texture
Metal Industry	Die Release Agent
Tyre Industry	As an activator for Die release agent

Packing Size: 20Kgs/Bag (Standard Packing Size).

2. Calcium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)	Particle Size (325 Mesh)
IR-100	145~160	6.5~7.3	Max 0.5	3.0 Max	0.2~0.3	90% Pass	
ISC-100	145~160	6.5~7.3	Max 0.5	3.0 Max	0.28~0.38		90% Pass

Modified Calcium Stearate (IR-102):

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)
IR-102	140~150	6~7	1 Max	3 Max	0.26	90% Pass

Environment: Biodegradable

Toxicity: Calcium Stearate is non-toxic as per the following reference:

(U.S.A) FDA Title 21CFR 172.863-177.2600-184.1229.

(EEC) Commission Directive 90/128/EEC and further amendments.

Applications:

Food Industry	Flow agents in Powders including some foods and surface conditioner in candies
Fabric Industry	Waterproofing Agent
Stationary Industry	Lubricant in Crayons & Pencils
Construction Industry	As waterproofing and used for efflorescence control
Paper Industry	Lubricant for providing gloss and fold cracking
Plastic Industry	Lubricant, Acid Scavenger, release agent
Pharmaceutical Industry	Tablet Mold release, Anti Tack Agent, Gelling agent

Packing Size: 20Kgs/Bag (Standard Packing Size).

3. Magnesium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)
IR-300	120~135	4~5	1Max	Max 3.0	0.28	90% Pass

Modified Magnesium Stearate (IR-302) :

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)
IR-302	120-135	3.5~4.5	2.0 Max	Max 3.0	0.28	90% Pass

Environment: Biodegradable

Toxicity: Magnesium Stearate is non-toxic as per the following reference:

(U.S.A) FDA Title 21CFR172.863-175.300

(EEC) Commission Directive 90/128/EEC and further amendments

Applications:

Pharmaceutical Industry	Used as Dilutent in manufacturing tablets, capsules and powders.
Food Industry	Used for binding sugar in hard candies
Petrochemical Industry	Used as a lubricant

Packing Size : 20Kgs/Bag

4. Aluminium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)	Particle Size (325 Mesh)
IR-800	160 Maximum	5.5 Maximum	8.0 Max	1.5Max	0.20~0.30	90% Pass	

Applications:

Petrochemical Industry		High Temperature resistance when used in Lubricants. Used for defoaming properties
Metal Industry		As lubricant for wire drawing
Paint Industry		For improving pigment suspension, water resistance and gloss.
Ink Industry		Used for thickening & suspension improving
Rubber Industry		Used for preventing stickiness.
Plastic Industry		Used for lubricant for Polyamides and Thermosetting plastics
Construction Industry		Used for improving water resistance

Packing Size: 15Kgs/Bag

5. Barium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)	Particle Size (325 Mesh)
IR-400	200~210	19.5~20.5	2.0 Max	1.0 Max		90% Pass	

Packing Size: 20Kgs/Bag.

6. Lithium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)
IR-200	190~200	2.5Max	0.5 Max	2.0Max	0.1-0.25	90% Pass

Packing Size: 10Kgs/Bag.

7. Sodium Stearate:

Grades	Appearance	Moisture	FFA(%)	Melting Point (°C)	Particle Size (100Mesh)
IR-500	White Powder	Max 3	Max1.5	200-210	90% Pass



8. Potassium Stearate:

Grades	Appearance	Moisture	FFA
IR-561	White Powder	Max 6	2 Max

9. Hydrogenated Castor Oil (Powder Form):

Grades	Melting Point °C	Acid Value	Iodine Value	Hydroxyl Value	Saponification Value	Color in Gardner Scale	Particle Size (200 Mesh)
HCO (Powder Form)	85~87	3Max	Max 2.5	Min 155	175~183	Max 2	90% Min

Packing Size: 20Kgs/Bag.

10. Iscowax (Fatty Acid Bis-Amides):

Grades	Acid Value	Amine Value	Melting Point	200Mesh
Iscowax-C	Max 10	Max 2.5	141-143	90% Pass
Iscowax-C	Max 10	Max 2.5	141-143	Beads/Prills
Iscowax-OL	Max 10	Max 5	115-125	Powder
Iscowax-HF	Max 10	Max 5	135-145	90% Pass

Packing Size: 25Kgs/Bag.

11. PE-Wax (Iscowax) (Non- Oxidized):

Grades	Viscosity (cps/160°C)	Density (gm/cc)	Hardness, dmm	Melting Point	Acid Value
Iscowax-A	397	0.92	3.2	Max 110	Nil
Iscowax-ALH-1200	1200	0.92	2.5	107	Nil
Iscowax-AH 633	393	0.94	1.8	117	Nil
Iscowax-E	200	0.93	Max 5	105-110	Nil
LP Wax (Flakes)	200	0.93	Max 5	105-110	Nil

12. Oxidized PE wax:

Iscowax-O	200	0.93	Max 5	105	16
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Packing Size: 25Kgs/Bag.

13. IR-722- Glycerol Ester (GMS):

Grades	Acid Value	Saponification Value	Mono Glycerol (%)	Free Glycerol (%)	Melting Point (°C)	Particle Size
IR-722 (P)	2 Max	155-165	90 Min	2 Max	68-75	200Mesh - Min 90% Pass

Packing Size: 15Kgs/ Box.

14. IR-724 (Glycerol Tri-Stearate):

Grades	Acid Value	Saponification Value	Iodine Value	Water Content (%)	Melting Point (°C)	Particle Size
IR-724 (P)	2 Max	186-192	2 Max	0.5 Max	55-65	200 Mesh- Min 90% Pass

Packing Size: 15Kgs/Box.

15. Non-Ionic Surfactants:

PEG 200, 300, 400, 600, 1500, 4000, 6000, 8000.

16. PEG Esters:

PEG Mono & Di-Stearates.

17. Polysorbates:

Polysorbate 20.

Polysorbate 60.

Polysorbate 80.



We understand the need for quality and we therefore strive to offer you quality products with prompt and friendly services. We maintain quality throughout the process and also have quality staff to assist our clients at various stages of their product development.

Quality Policy:



All products manufactured by us are of vegetable origin and certification such as Halal and Kosher is available.

India Operations:

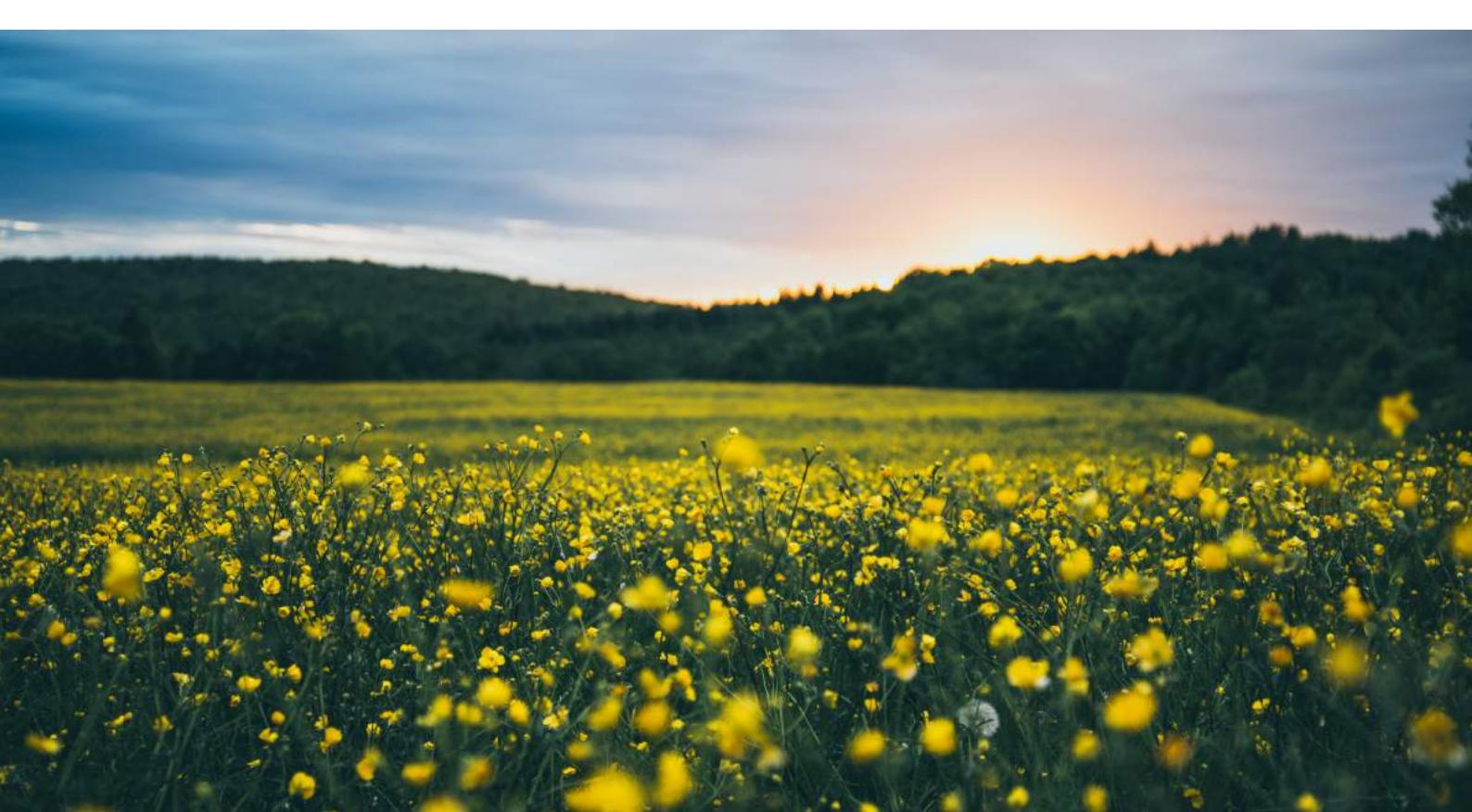
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Additives That Matter

Additives For Paints and Coatings



Introduction:

IRRH Specialty Chemicals India Limited has been producing paint additives with its indigenous technology and has been leading the specialty chemical market with its superior technical expertise.

Based on accumulated technical expertise and excellent research capability, we are creating new products for the 21st century. We always strive to provide our customers complete satisfaction and try to impress them with our innovative products and services, at all times. We, research and develop new products and technology continuously. Also we promise to develop and provide quality solutions for your additive queries always.

With technical expertise from Irrh Specialty Chemicals Co. Ltd, S.Korea, Irrh Specialty Chemicals India Limited was founded in January 2010. Irrh Specialty Chemicals India Limited established its new manufacturing facility for **Metallic Stearates, Anti-Settling and Anti-Sagging Agents, Polyamide waxes and Polyethylene Waxes** in Abu Road, Rajasthan, India and started commercial production in January 2012.



The Products :

Anti- Settling and Anti- Sagging Agents (Paste Form)

Iscowax- HF (Paste)- Iscowax- HF Paste is Anti- Settling agent in Paste form based on amide wax rheology. It is easy to incorporate as it is already pre-activated.

Properties: White- Off White Paste.

Volatile: Xylene

Solids: 22%.

Addition Level by Total Weight: 2-5%



Iscowax- HOF (Paste)- Iscowax-HoF is amide wax with additives in paste form. It helps in preventing settling and sagging in solvent based Paints. It can be easily used in heavy duty primers, where pigment loading is high as it provides good anti-settling properties without increasing the viscosity.

Properties: White- Off White Paste.

Volatile: Xylene

Solids: 22%.

Addition Level by Total Weight: 2-5%

1. Anti-Settling and Anti-Sagging agents (Powder Form)

Iscowax- Hf- Micronized Anti-Settling agent based on Amide Wax Rheology for solvent based, high- solids and solvent free applications . Iscowax-Hf due to its hydrogen bonding lowers the activation temperature which upon heating, swells and disperses to provide efficient thickening.

Properties:

Appearance: White- Off White Powder.

Capillary Melting Point: 135-145°C.

Anti-Settle and Sag resistance: 0.5-1.5%.

Iscowax- HOF (Powder)- Micronized amide wax with additives for all types of solvent based coatings. Iscowax Hof powder can be easily incorporated and activated by High Speed stirrers.

Properties: White- Off White Powder.

Capillary Melting Point: 115-125°C.

Anti-Settle and Sag resistance: 0.5-1.5%.

Aluminium Stearate:

Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)	Particle Size (325 Mesh)
IR-800	160 Maximum	5.5 Maximum	8.0 Max	1.5Max	0.20~0.30	90% Pass	

Applications:

Petrochemical Industry

High Temperature resistance when used in Lubricants. Used for defoaming properties

Paint Industry

For improving pigment suspension, water resistance and gloss.

Ink Industry

Used for thickening & suspension improving

Construction Industry

Used for improving water resistance

Packing Size: 15Kgs/Bag

ISC- Castor Wax (Powder Form):

Grades	Melting Point °C	Acid Value	Iodine Value	Hydroxyl Value	Saponification Value	Color in Gardner Scale	Particle Size (200 Mesh)
Castor Wax (Powder Form)	85~87	3Max	Max 2.5	Min 155	175~183	Max 2	99% Min

2 Waxes For Paint and Ink Industry:

Iscowax-CF- Micronized Amide wax is used in wood coatings to improve surface slip, sanding and matting properties. It is used in powder coatings to improve the surface slip of the powder and also as degassing agent.

Applications: All types of Wood and furniture coatings.

Powder coatings.

Can Coatings.

Dosage: 0.2-1.8%, based on the weight of total formulation.

Packing Size: 20Kgs/Bag.

Iscowax-OL- Polyamide wax used in inks as adhesion and scratch resistance.

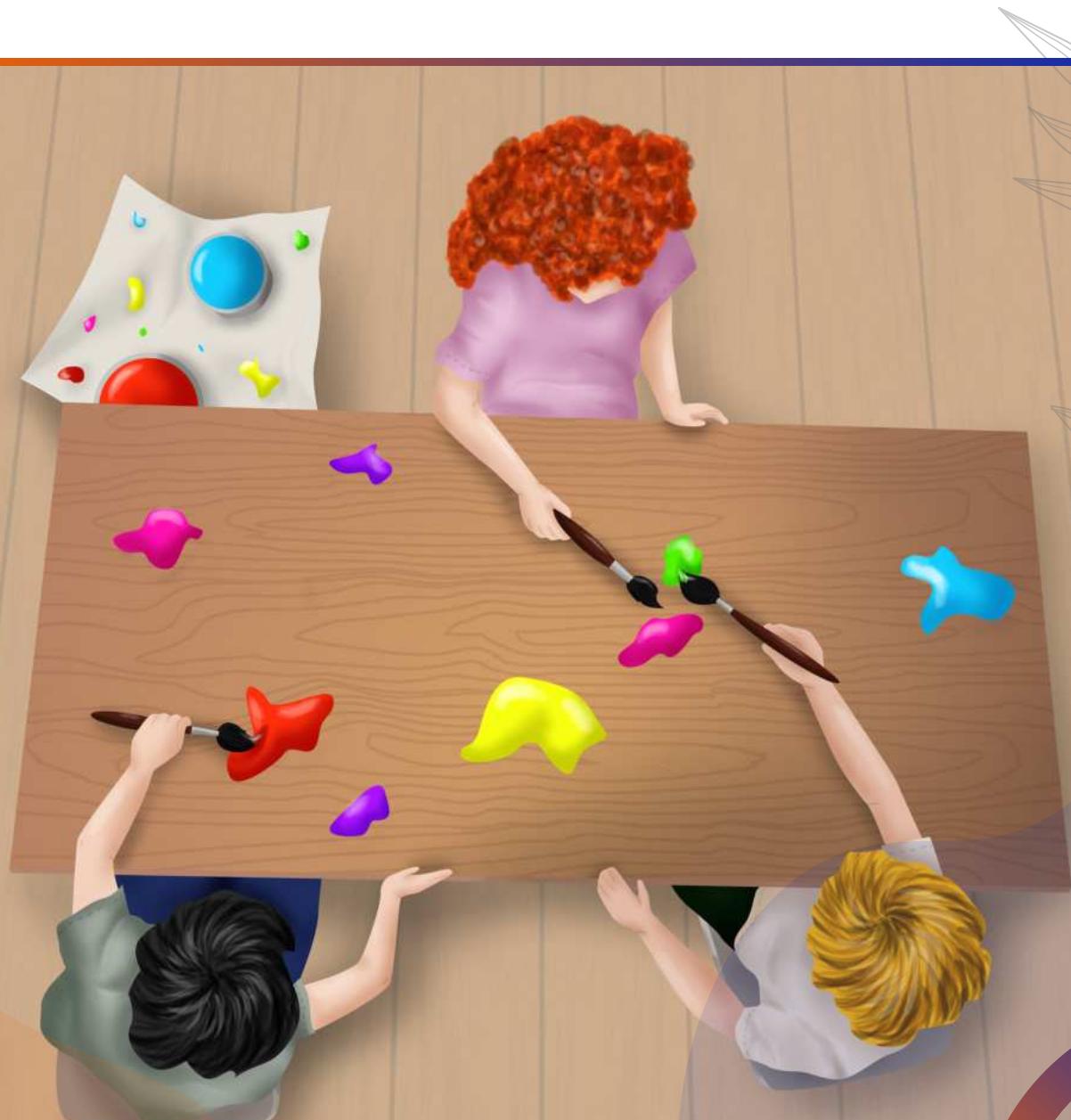
Amine Value: Max 5.

Melting Point: 95-105 Degrees C.

Appearance: White powder.

Acid Value: Max 5.

Packing Size: 20Kgs/Bag.



PE Waxes:

Grades	Viscosity (cps/160°C)	Density (gm/cc)	Hardness, dmm	Melting Point	Acid Value
Iscowax-A	397	0.92	3.2	Max 110	Nil
Iscowax-ALH-1200	1200	0.92	2.5	107	Nil
Iscowax-AH 633	393	0.94	1.8	117	Nil
Iscowax-O	200	0.93	Max 5	105	16

Packing Size: 25Kgs/Bag

1. Zinc Stearate:

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ISC-500	116~125	10.4~11.4	Max 0.5	Max 0.5	0.20~0.03	325 Mesh - 99% Pass
ISC-350	116-125	10.4-11.4	Max 1	Max 0.5	0.2-0.3	350 Mesh - 99% Pass

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Grades	Melting Point °C	Metal Content (%)	Free Fatty Acid Content (%)	Moisture Content (%)	Bulk Density (gr/ml)	Particle Size (200 Mesh)	Particle Size (325 Mesh)
ISC-100	145~160	6.5~7.3	Max 0.5	3.0 Max	0.28~0.38		90% Pass

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Applications:

Construction industry

As waterproofing and used for efflorescence control

Packing Size: 20Kgs/Bag

3. Non-Ionic Surfactants:

PEG 200, 300, 400, 600, 1500, 4000, 6000, 8000 and Others.

4. PEG Esters:

PEG Mono & Di-Stearates.

5. Polysorbates:

Polysorbate 20.

Polysorbate 60.

Polysorbate 80.

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Additives That Matter

이레케미칼

BEAUTY & CARE
ADDITIVE GUIDE



Functional Additives with Proven Performance

At IRRH Specialty Chemicals, we combine deep technical expertise with global quality standards to deliver ingredients that enhance both performance and aesthetics in cosmetic formulations. Our focus on consistency, purity, and functional efficiency ensures that every batch meets the demanding needs of skincare, haircare, and personal care industries.



Sodium Stearate

Sodium Stearate is a widely used emulsifier, thickener, and gelling agent in cosmetics. It enhances foam stability, contributes to texture and hardness, and is essential in solid formulations. Its ability to provide mild cleansing and opacity makes it ideal for both skincare and hygiene products.

Applications: Transparent soaps, deodorant sticks, shaving foams, cleansing bars.

Potassium Stearate

Potassium Stearate functions as an oil-in-water emulsifier, stabilizer, and cleansing agent. It helps create stable, smooth emulsions, improves cream viscosity and spreadability, and enhances the skin feel of formulations. It is especially valued in personal wash products, soaps, and emulsified skincare.

Applications: Soaps, creams, lotions, liquid foundations, facial cleansers, haircare emulsions.



Hydrogenated Castor Oil (HCO - Powder)

Hydrogenated Castor Oil is a versatile viscosity modifier and consistency stabilizer. It offers oxidative stability and supports structural integrity in stick formulations. It also adds smoothness and gloss to personal care products.

Applications: Lip balms, deodorant sticks, styling waxes, ointments.

Enhancing Stability, Texture, and Sensory Appeal

We understand that today's cosmetic formulators seek more than raw materials – they need solutions that guarantee stability, texture, and consumer appeal. From structuring agents to performance waxes, our portfolio is designed to help brands create products that are not only reliable but also deliver the sensory experience customers expect. With IRRH, you partner with a team that values innovation, technical support, and long-term relationships.



Stearic Acid (Triple Pressed) & 12-HSA

Stearic Acid and 12-Hydroxy Stearic Acid are essential structuring agents in cosmetics. Stearic Acid improves cream body, foam stability, and opacity, while 12-HSA offers gelling strength and high-viscosity control. Together, they ensure both formulation stability and luxurious texture.

Applications: Creams, lotions, shaving foams, balms, high-viscosity ointments.

Polyethylene Wax (PE Wax)

PE Wax is a high-performance additive that enhances hardness, gloss, slip, and smoothness in cosmetics. It is highly effective in improving texture, durability, and payoff in decorative and personal care formulations.

Applications: Lipsticks, mascaras, pressed powders, cream-to-powder foundations.



Ethylene Bis Stearamide (EBS Wax)

EBS Wax acts as a slip agent, binder, and anti-tack additive, improving texture, spreadability, and stability in cosmetic products. It is particularly valuable in powder and stick formulations to ensure smooth application and lasting performance.

Applications: Pressed powders, blushes, lipsticks, compact makeup.