



# LECITHIN RELEASE

## ADM LECITHIN

In food applications, release agents are most often used to ensure the separation of a cooked product from the cooking surface. Lecithin is an all-natural, label-friendly ingredient that enhances any food-grade release agent, improving separation and lowering costs.

Lecithin has a simultaneous affinity for both oils and water, which makes it an effective ingredient in pan releases and other lubricants.

When mixed with vegetable oils or other lubricants (the bases of most release formulations), lecithin acts as a surfactant. This reduces surface tension and creates a thin, even release barrier not achieved by oil alone. The result is a more effective and efficient release agent that will improve your results while saving you money.

## ADM LECITHIN IN RELEASE APPLICATIONS

Lecithin is an excellent release agent in food applications including pan release, belt release and product release.

### PAN RELEASE

- Lecithinated release agents form fluid lipid barriers
- Ensure quick, clean separation
- Available for spray or brush applications
- Aerosol pan release
- Bread pan formulas
- Cakes, cookies and other high-moisture speciality product formulas

### BELT RELEASE

- Useful in continuous cooking and baking processes using belts or conveyors
- Typically included in oil or melted shortening
- Water-dispersible lecithin for use in dip tank
- Water-dispersible product provides release and assists in cleanup

### PRODUCT SEPARATION

- Prevents sticking in finished food products
- Allows for separation of slices of high-moisture pasteurised cheese

## HEAT-RESISTANT APPLICATIONS

- For use during prolonged heating periods
- Modified lecithin resists darkening and build-up
- Mold release, pan sprays, griddle and frying operations

Lecithin has a simultaneous affinity for both oils and water, which makes it an effective ingredient in pan release. In food applications, release agents are most often used to ensure the separation of a baked product from the baking surface.



## RECOMMENDED ADM LECITHINS

- Beakin™: Low viscosity, complexed lecithins specifically designed for spray applications
- Thermolec®: Standardized, enzymatically modified. These products exhibit the properties of being not only water-dispersible, but also heat resistant (up to 350°F).
- Performix™: Designed for applications requiring a highly water dispersible product with a high HLB. Performix products are ideal for applications requiring aqueous release, such as continuous cooking belts and netting material for cooked meats.
- Yelkin™: Standardized, multi-purpose lecithins



For customers around the world, ADM draws on its resources—its people, products, and market perspective—to help them meet today's consumer demands and envision tomorrow's needs.

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| FLUID LECITHINS                  |   |  |                                       |   |
|----------------------------------|---|--|---------------------------------------|---|
| Product                          | Typical Analyses                                    |  |                                       | Applications  |
| COMPLEXED LECITHINS              |   |  |                                       |   |
| Beakin® LV1                      | AI, % 50 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 25 max.<br>Form: Translucent fluid | Viscosity: 20 max.<br>(Stokes, 25°C)  | Instant beverage mixes, instant foods, release agents, and spray oils   |
| Beakin LV3                       | AI, % 32 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 25 max.<br>Form: Translucent fluid | Viscosity: 10 max.<br>(Stokes, 25°C)  |   |
| Beakin LV30                      | AI, % 32 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 25 max.<br>Form: Translucent fluid | Viscosity: 10 max.<br>(Stokes, 25°C)  |   |
| Performix™ CC                    | AI, % 50 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 28 max.<br>Form: Translucent fluid | Viscosity: 30 max.<br>(Stokes, 25°C)  |   |
| Performix™ E                     | AI, % 50 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 26 max.<br>Form: Translucent fluid | Viscosity: 30 max.<br>(Stokes, 25°C)  | Agglomerated powders, aqueous release agents, instant beverage mixes, and instant foods   |
| Performix PS                     | AI, % 50 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 26 max.<br>Form: Translucent fluid | Viscosity: 65 max.<br>(Stokes, 25°C)  |   |
| MODIFIED LECITHINS               |   |  |                                       |   |
| Yelkin 1018                      | AI, % 58 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 17 max.<br>AV: 38 max.<br>Form: Opaque fluid      | Viscosity: 250 max.<br>(Stokes, 25°C) | Baked goods, dairy products, instant beverage mixes, instant foods, release agents, and confections   |
| Thermolec® 57                    | AI, % 56 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 28 max.<br>Form: Translucent fluid | Viscosity: 30 max.<br>(Stokes, 25°C)  |   |
| Thermolec 200                    | AI, % 62 min.<br>H2O, % 0.8 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 75 max.<br>(Stokes, 25°C)  |   |
| Thermolec WFC                    | AI, % 60 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 13 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 100 max.<br>(Stokes, 25°C) |   |
| STANDARD LECITHINS               |   |  |                                       |   |
| Yelkin® T                        | AI, % 65 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 17 max.<br>AV: 30 max.<br>Form: Opaque plastic    | Viscosity: N/A                        | Baked goods, cheese products, confections, dairy products, icings, frostings, instant beverage mixes, instant foods, margarines, and release agents       |
| Yelkin TS                        | AI, % 62 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 17 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 100 max.<br>(Stokes, 25°C) |   |
| Yelkin SS                        | AI, % 62 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 100 max.<br>(Stokes, 25°C) |   |
| Yelkin DS                        | AI, % 62 min.<br>H2O, % 1.0 max.<br>HI, % 0.05 max. | Color: 12 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 100 max.<br>(Stokes, 25°C) |   |
| PURIFIED LECITHIN                |   |  |                                       |   |
| Yelkin Gold                      | AI, % 62 min.<br>H2O, % 0.5 max.<br>HI, % 0.05 max. | Color: 14 max.<br>AV: 30 max.<br>Form: Translucent fluid | Viscosity: 100 max.<br>(Stokes, 25°C) | Baked goods, confections, instantized foods, instant beverage mixes, and dairy products   |
| DEOILED LECITHINS                |   |  |                                       |   |
| Product                          | Typical Analyses                                    |  |                                       | Applications  |
| ULTRA-FILTERED DEOILED LECITHINS |   |  |                                       |   |
| Ultralec® P                      | AI, % 97 min.<br>H2O, % 1.5 max.                    | Color: Light gold<br>Form: Powder                        | Viscosity: N/A                        | Baked goods, confections, dairy products, ice cream stabilizers, icings, frostings, instant beverage mixes, instant foods, and meat in sauces and gravies |
| Ultralec F                       | AI, % 97 min.<br>H2O, % 1.5 max.                    | Color: Light Gold<br>Form: Fine granules                 | Viscosity: N/A                        |   |

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