

Water-Based Semi-Permanent Non-Transferring PU Integral Skin Foam Mold Release Agent for Automotive Polyurethane Parts

Basic Information

- Place of Origin: Shanghai, China
- Brand Name: Lubekote
- Certification: ISO 9001:2015
- Model Number: XX
- Minimum Order Quantity: 20 kg
- Price: Negotiable
- Packaging Details: 25L/barrel, 200L/drum, or customized packaging available
- Delivery Time: 7-15 working days
- Payment Terms: T/T
- Supply Ability: 5000 kg per month



Product Specification

- Application: PU Integral Skin Foam Parts, Automotive Interior Armrests, Headrests, Dashboards, Door Panels
- Dispersing Medium: Water-based
- Coating Type: Semi-permanent
- Appearance: White Emulsion
- Odor: Slight, Non-irritating
- Surface Finish: Perfect Smooth Skin Finish
- PU System Compatibility: MDI And TDI Based Integral Skin Foam Systems
- Dilution Ratio: Ready To Use Or Dilute With Deionized Water Per Process
- Transfer Resistance: Non-transferring To Finished Products
- Shelf Life: 12 Months In Sealed Container At 5-35°C
- Highlight: **PU integral skin release, automotive interior demolding, water-based polyurethane coating**

Product Description

Water-Based PU Integral Skin Foam Mold Release Agent for Automotive Interior Armrest Headrest Polyurethane Parts

Lubekote PU-ISF series is a purpose-engineered water-based semi-permanent mold release agent specifically developed for polyurethane integral skin foam molding applications in the automotive interior sector. Integral skin foam technology, which produces parts with a dense, durable outer skin and a cellular foam core in a single molding operation, places unique demands on mold release systems that conventional general-purpose agents cannot adequately address. Lubekote PU-IS has been formulated to deliver flawless release performance while preserving the critical skin surface quality that defines the aesthetic and tactile experience of automotive interior components such as armrests, headrests, dashboards, and door panels. The water-based formulation aligns with automotive industry sustainability initiatives while providing a safe, clean production environment for mold operators.

The automotive interior market demands exceptional surface quality consistency across high-volume production runs, with zero tolerance for release-related defects such as pinholes, skin delamination, surface roughness, or gloss variation. Lubekote PU-IS meets these exacting standards through an advanced polymer system that forms a micro-smooth release film on mold surfaces, enabling the PU integral skin to form perfectly against the mold cavity without interference or contamination from the release agent itself. The semi-permanent coating characteristic translates to significant productivity gains through reduced mold preparation frequency, while the non-transferring property ensures full compatibility with subsequent assembly operations including adhesive bonding and surface finishing treatments.

Key Features

- **Water-Based Eco-Friendly Technology:** Solvent-free formulation meets the sustainability requirements of global automotive OEM supply chains while eliminating VOC emissions and hazardous air pollutants from the PU molding workplace environment.
- **Perfect Integral Skin Surface Finish:** Enables the formation of flawless, defect-free PU integral skin surfaces with consistent texture, gloss level, and tactile quality across the entire molded part and throughout extended production runs.
- **Non-Transferring Clean Release:** The cured release film does not migrate to the PU part surface, preserving the skin integrity essential for subsequent leather wrapping, painting, soft-touch coating, and adhesive bonding operations.
- **Semi-Permanent Multi-Cycle Performance:** A single application provides reliable release across multiple molding cycles, significantly reducing mold preparation labor, downtime, and per-unit release agent consumption in high-volume automotive production.
- **Automotive Interior Application Versatility:** Proven performance across the full range of automotive interior PU integral skin components including armrests, headrests, instrument panels, door trim panels, console covers, and steering wheel airbag covers.
- **Minimal Mold Build-Up:** The advanced anti-fouling polymer formulation prevents PU residue accumulation on mold surfaces, extending the intervals between mold cleaning operations and preserving intricate mold cavity details.
- **MDI and TDI System Compatibility:** Fully compatible with both MDI-based and TDI-based polyurethane integral skin foam formulations commonly used in automotive interior parts manufacturing worldwide.

Technical Specifications

Parameter	Specification
Product Series	Lubekote PU-IS Series
Classification	Chemical mold release agent
Dispersing Medium	Deionized water
Appearance	White emulsion
Odor	Slight, non-irritating
pH Value	6.5 - 7.5
Specific Gravity	0.98 - 1.02 g/cm ³
Application Method	Spray application recommended for uniform coverage
PU System Compatibility	MDI and TDI based integral skin foam systems
Shelf Life	12 months in original sealed container at 5-35°C

Applications

Lubekote PU-IS is specifically designed for automotive interior PU integral skin foam molding operations where surface quality, production efficiency, and environmental compliance are equally critical. Primary application areas include automotive armrest and center console cover PU integral skin production, headrest PU foam molding for front and rear seating systems, instrument panel and dashboard PU skin manufacturing, door trim panel and interior garnish PU component production, steering wheel airbag cover integral skin molding, gear shift knob and handbrake lever cover PU foam production, and other automotive interior components requiring the combination of a durable outer skin and energy-absorbing foam core in a single molding process. The product is fully compatible with aluminum and steel mold tooling used in automotive PU molding operations and integrates seamlessly with automated robotic spray application systems.

Packaging & Quality Assurance

Lubekote PU-IS release agent is available in standard 25L/barrel and 200L/drum packaging configurations, with customized packaging and automated dispensing system-compatible container solutions available for high-volume automotive parts manufacturing facilities. Comprehensive quality assurance testing performed on every production batch includes multi-cycle release performance evaluation on production-representative PU integral skin foam systems, surface quality assessment using profilometry and gloss measurement instrumentation, skin integrity verification through cross-section microscopy analysis, and coating durability testing under simulated high-volume production conditions. Manufactured under ISO 9001:2015 quality management standards, Lubekote PU-IS delivers the consistent performance and reliability that automotive Tier-1 and Tier-2 suppliers require. Shanghai LoreChem Co., Ltd. provides dedicated technical support including on-site application process optimization, compatibility verification with customer-specific PU formulations, and continuous quality monitoring services.



Shanghai Lorechem Company Limited



15901891635



export@lorechem.com



shlorechem.com

Floor 2-3, Building 20, Hongxing International Plaza, Lane 1818, Lianhang Road, Pujiang, Shanghai