

# ProtekoteSr572

TECHNICAL DATA SHEET

DKS COATINGS

## Abrasion and Stone Chip Resistant Graphene Coating for High-Speed Train Underbodies

Protekote Sr572 represents a breakthrough in protective coatings specifically designed for high-speed train underbodies. Infused with advanced graphene technology, this coating offers unparalleled resistance to abrasion and stone chips, ensuring the durability and integrity of critical components beneath high-speed trains.



**Graphene Infusion:** Protekote Sr572 incorporates graphene, a material renowned for its exceptional strength and durability. This graphene-infused coating provides superior protection against abrasion and impact, crucial for maintaining the structural integrity of high-speed train underbodies.

**Abrasion Resistance:** Engineered to withstand the rigors of high-speed travel, Protekote Sr572 offers exceptional resistance to abrasion. The coating forms a durable barrier that shields underbody surfaces from wear caused by contact with tracks, debris, and other abrasive elements encountered during operation.

**Stone Chip Protection:** Protekote Sr572 effectively guards against stone chips and impact damage, minimizing surface

pitting and corrosion on train underbody components. This ensures prolonged service life and reliability of critical underbody systems, even in high-speed environments.

**Tailored Formulation:** The formulation of Protekote Sr572 is specifically optimized for high-speed train underbodies, ensuring compatibility with the unique operating conditions and materials commonly found in this application. Its flexibility allows for seamless integration into existing maintenance protocols.

**Long-lasting Performance:** With its robust formulation and advanced adhesion properties, Protekote Sr572 delivers long-lasting protection, reducing maintenance frequency and associated downtime for high-speed train fleets. This enhances operational efficiency and minimizes lifecycle costs.

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## Technical Specifications:

- **Composition:** Graphene-infused polymer matrix designed for high-speed train underbody applications
- **Thickness:** Typically applied at 200-300 microns per coat for optimal protection
- **Coverage:** Dependent on substrate and application method, tailored for high-speed train underbody surfaces
- **Adhesion:** Excellent adhesion to various substrates including metals, alloys, and composite materials commonly used in high-speed train construction
- **Temperature Resistance:** Engineered to withstand extreme temperature variations encountered during high-speed travel, maintaining performance from -40°C to 150°C
- **Chemical Resistance:** Resistant to a wide range of chemicals, solvents, and environmental factors present in high-speed rail environments
- **Application Method:** Suitable for spray or roller application, compatible with standard coating equipment used in high-speed train maintenance facilities

**Enhanced Safety:** Protekote Sr572 enhances safety by protecting critical underbody components from abrasion and impact damage, minimizing the risk of failures and service disruptions during high-speed operations.

**Extended Maintenance Intervals:** By reducing the need for frequent recoating and repairs, Protekote Sr572 optimizes maintenance schedules, minimizing downtime and associated costs for high-speed train fleets.

**Cost-Efficiency:** Protekote Sr572 offers cost-effective solutions by prolonging the lifespan of underbody surfaces, reducing overall maintenance expenditures and lifecycle costs associated with high-speed train operations.

Protekote Sr572 sets a new standard for protective coatings for high-speed train underbodies, providing unmatched resistance to abrasion and stone chips while ensuring long-lasting performance and reliability. With its tailored formulation and advanced graphene technology, Protekote Sr572 offers the ideal solution for enhancing the safety, efficiency, and durability of high-speed rail operations.

For further information or technical inquiries, please contact our dedicated team of experts..

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