



Product Technical Bulletin

Fleet, Farm & Heavy Equipment Finishes

Magnet Paint & Shellac Co., Inc. • 336 Bayview Avenue • Amityville, New York 11701
(631) 842-7700 • Fax (631) 842-8222 • Email: info@magnetpaints.com • Web Site: www.magnetpaints.com

Rust Preventive Paint

CHASSIS SAVER™

Truck & Auto Underbody Coating

- Single Component - NO Hardener or Catalyst Required
- Minimal Surface Preparation Using Only a Wire Brush
- Apply Directly Over Tight Rust or Sand Blasted Metal
- Isolates Metal From Oxygen and Moisture
- Chemically Bonds to Surface - No Primers Needed
- Will Not Crack, Chip, Flake or Peel
- Completely Unaffected by Road Salt, Acids, Gasoline, Diesel Fuel, Corrosives or Chemicals
- Field Tested & Proven Over 10 Years in Heavy Truck and Commercial Fleet Refinish Markets



STOPS RUST PERMANENTLY!

Product Description

CHASSIS SAVER™ is a high build, VOC compliant, single component chassis paint and underbody coating specially formulated to permanently stop automotive and truck corrosion without the use of primers and topcoats. In situations where only marginal surface preparation can be achieved, Chassis Saver's unique "RUST STOPPING" properties permit its application directly over tightly adhered rust. Chassis Saver chemically bonds to rusty metal to form a rock hard yet flexible, glaze-like, non-porous finish that will not crack, chip, flake or peel. It works by isolating metal from oxygen and moisture, and without these factors present...RUST STOPS – Dead in its tracks! Chassis Saver is actually strengthened by exposure to moisture and is completely unaffected by road salt, gasoline, diesel fuel, oils, battery acids, hydraulic fluids, solvents, chemicals, or corrosives. Chassis Saver is available in gloss black and silver-aluminum low luster finish. An antique satin black finish is being developed.

NOTE: Chassis Saver is not intended as a "cosmetic" coating for finishing applications. It has a sensitivity to UV (sunlight) and its initial appearance will change over time. Its "RUST STOPPING" properties and corrosion resistance will never degrade but its color will shift from black to charcoal gray. If aesthetics are important, Chassis Saver can and should be top coated with a quality industrial or automotive finish. Any opaque finish is effective. Clear coating is not recommended as protection. See the "Technical Data" section on the reverse side for recommended top coats.

Suggested Uses

Truck and auto underbody (chassis, frames, floorboards, under fenders, engine compartments, trunk areas, fire walls, etc.), heavy equipment, boat trailers, tractors and other farm machinery, buses, military vehicles, dumpsters, roll offs, fork lifts, truck bodies, tanks, structural steel, pipes, iron works, fence posts, chain link, steel truck rims, metal roofs and even concrete floors.

Surface Preparation

RUSTED SURFACES - For optimum surface preparation, sandblasting is recommended. In situations with heavy build-up of road tar, sandblasting is strongly recommended. However, in situations where sandblasting is restricted or simply not practical, Chassis Saver can be applied over tightly rusted surfaces, so long as rust profile is covered by a first coat of Chassis Saver at least 1.5 mils dry film thickness followed by a second coat of 2 to 3 mils DFT. It is necessary to remove all oil, grease, loose scale or rust and loose paint using a stiff wire brush, by hand tool cleaning or by other suitable means. Clean and degrease with a commercial degreaser and flush thoroughly with plenty of fresh water. Wipe dry with a clean, dry cloth.

BARE METAL - NOT PREVIOUSLY PAINTED - New metal should be sandblasted for optimum adhesion. This is to provide an anchor pattern and to remove mill scale. Chassis Saver should be applied within four hours of blasting. (Maximum blast profile of 1.5 mils.) If bare metal cannot be sandblasted, surfaces should be roughened using a grinding disc or coarse sandpaper.

NOTE: The use of "rust converter" products is not recommended as they may affect bonding of Chassis Saver to metal. Chassis Saver likes to adhere to surfaces with "tooth" rather than smooth or glossy surfaces. Metal prepping

solutions may also be ineffective in promoting adhesion as they DO NOT provide enough profile for Chassis Saver to adhere to a smooth metal surface. A self etching primer can be used and then top coated with Chassis Saver. It is advisable to do a test patch first to check adhesion.

PREVIOUSLY PAINTED SURFACES (WITH OR WITHOUT RUST) - Previously painted surfaces must be sanded to a dull surface.

Application

IMPORTANT: Before opening package, read all warnings. Follow all precautions. Never open a can of Chassis Saver until you are absolutely ready to use it. Never work directly from a can of Chassis Saver unless you plan to use the entire contents in one painting session.

MIXING: NEVER SHAKE Chassis Saver. Stir gently until material is mixed uniformly. Strain material prior to spray application. Thin only if necessary for spray application with up to 10% of Magnet S8 Multi-Temp Reducer. Do not use lacquer thinner!

HANDLING: Loosen closure carefully; container may be under slight pressure. Withdraw only enough from original container for use in one application. After withdrawal, gently pour a small amount (2 - 4 ounces) of S8 Reducer over the remaining portion of Chassis Saver in the original can. DO NOT mix this solvent into the Chassis Saver. Let it remain on top until you are ready to use the product again. This procedure is called a "solvent float" and will help prevent premature spoilage of the material. Solvent will prevent air from coming in contact with the Chassis Saver. Reseal can immediately using plastic food wrap between lid and groove of can. If can gets sealed metal-to-metal with paint in the groove, can will be sealed permanently. If this should happen, wait until material is needed, agitate can gently and use a can opener to puncture the bottom of the can. Transfer material to clean container and use immediately. Best method: keep groove free from paint by scooping paint from container using small paper cups or coffee scoop. If paint gets in groove, use tip of rag to wipe out groove.

NOTE: Material withdrawn from original container should be stored separately and used promptly. NEVER RETURN ANY PORTION OF UNUSED MATERIAL TO THE ORIGINAL CONTAINER. The used material will have started to cure and will spoil the rest of the unused material rendering it useless. Keep containers closed to prevent contact with moisture vapor which will shorten shelf life and cause thickening and gelling. Refrigeration of unused portion will extend shelf life.

APPLICATION NOTE: It is imperative that all surfaces be free from oil, dirt, grease and other contaminants. To avoid surface defects, bubbling and/or blistering, surfaces must be completely free from any moisture prior to coating application. In addition, the coating should be dry for a minimum of 2 hours at 70°F and 50% R.H. prior to being subjected to moisture (rain); longer at lower temperatures and relative humidity.

Chassis Saver has been chosen for evaluation by the U.S. Air Force Management and Equipment Evaluation Program (MEEP) at select locations around the globe. Kadena Air Base, Okinawa, Japan has been slated as the #1 corrosion problem in the world for military ground vehicles and equipment and will be the primary focus of this evaluation.

GENERAL APPLICATION: Chassis Saver may be applied by brush or any type of conventional or HVLP spray equipment.

BRUSH or ROLLER APPLICATION: Apply without reducing in thin, even coats using an inexpensive nylon brush or short nap roller. Thin coats are better than heavy coats. Since Chassis Saver cures by reacting with moisture in the atmosphere it actually draws moisture into the film as it cures. Too heavy a coat will have a tendency to cure with small bubbles caused by this curing process. By the time this happens, the film has set up and is not fluid enough for the bubbles to break anymore. Please remember - Thin Coats!

SPRAY APPLICATION: HVLP Cup pressure: 6 - 7 psi. Air assisted airless pressure: 35 psi (at the gun) after adjusting spray pattern using fluid pressure typically 350 psi. Conventional pressure pot: 60 - 65 psi at the gun (fluid delivery 10 - 12 oz/min.) With a 12 to 14 inch gun distance, spray two medium-wet coats allowing 3 to 4 hours between coats. DO NOT apply Chassis Saver if the atmospheric temperature is less than 45°F.

RECOATING: Recoat Chassis Saver when the first coat seems hand slick but with a slight drag or tack to the surface. This will usually be between 3 and 6 hours. Highly humid conditions will shorten dry time and low humidity will lengthen dry. For films cured over 24 hours, scuff sand with 400-grit sandpaper to remove gloss before recoating.

CLEAN UP: Clean tools and spray equipment immediately after use with Magnet S8 Reducer, xylene or lacquer thinner. Do not leave material in spray guns, pressure pots or hoses. Once dry, Chassis Saver cannot be removed with solvent. If allowed to harden on equipment, use an industrial paint stripper for clean up. Avoid skin contact. Remove from skin at once to avoid temporary staining.

THE USE OF GLOVES DURING APPLICATION IS STRONGLY RECOMMENDED. Chassis Saver is virtually impossible to remove from your skin once it's dry. It will take a few weeks for the oils in your skin to help shed the stains you will be wearing. If you do get it on your skin, use some lacquer thinner or S8 Reducer immediately to wipe it off. Same for any other surface you may drip on. Do not attempt to remove dried Chassis Saver from skin with solvent; soak in warm, soapy water. Barrier creams are not recommended where it is possible to cover with protective clothing. Vinyl surgical type gloves are good. Nitrile gloves are stronger and more solvent resistant. We do not recommend the use of latex gloves.

Health & Safety Data

IMPORTANT: Spray equipment must be handled with due care and in accordance with manufacturer's recommendations. Spraying of any material can be hazardous. Wear respirator, eye protection and protective clothing. This material requires all cautions for spraying isocyanates.

DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVER SPRAY IS PRESENT, USE A POSITIVE PRESSURE, AIR SUPPLIED RESPIRATOR (NIOSH/MSHA TC-19C), EYE PROTECTION, GLOVES AND PROTECTIVE CLOTHING DURING THE WHOLE TIME OF SPRAY APPLICATION OR USE AND UNTIL ALL VAPORS AND SPRAY MIST ARE EXHAUSTED OR GONE. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. DO NOT PERMIT ANYONE WITHOUT PROTECTION IN THE PAINTING AREA.

KEEP OUT OF THE REACH OF CHILDREN DO NOT TAKE INTERNALLY

WEAR A PROPERLY FITTED VAPOR/PARTICULATE RESPIRATOR approved by NIOSH/MSHA for use with paints (TC-23C), eye protection, gloves and protective clothing during application and until all vapors and spray mist are exhausted. In confined spaces or in situations where continuous spray operations are typical, or if proper respirator fit is not possible, wear positive-pressure, supplied-air respirator (NIOSH/MSHA TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

NOTICE: Repeated and prolonged overexposure to solvents may lead to permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are signs that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Do not breathe vapors or spray mist. Do not get in eyes or on skin. Keep away from heat, sparks and flame. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition. Do not transfer contents to bottles or other unlabeled containers for storage. Close container after each use. Use only with adequate ventilation. Wash hands after using.

IN CASE OF FIRE: Use dry chemical, carbon dioxide or water spray fog. Closed containers may rupture or explode when heated. Keep cool with water spray.

FIRST AID: If affected by inhalation of vapor or spray mist, remove to fresh air. If breathing difficulty persists, or occurs later, consult a physician. In case of eye contact, flush eyes immediately with large amounts of water for at least 15 minutes and call a Physician. In case of skin contact, remove promptly by wiping, followed by waterless hand cleaner and soap and water. If irritation persists, see a physician. If swallowed, CALL A POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY; have label information available.

DO NOT induce vomiting. Remove and discard contaminated shoes and clothing or launder before reuse.

SPILL/WASTE: Remove all sources of ignition. Ventilate area and remove spilled material with inert absorbent. Dispose of contaminated material and/or unused contents in accordance with local, state and federal regulations. Careless disposal of any product is not environmentally responsible. Call your local sanitation department for aid in disposing of unwanted product in your area or call the Environmental Protection Agency Solvent and Hazardous Waste Hotline at 1-800-424-9346. Do not dump on the ground or in local sewer or discharge system.

For further information refer to
Material Safety Data Sheet available online at
www.magnetpaints.com/msdstech.asp

Technical Data & Specifications

Colors & Finish: Gloss black & non-leafing low sheen silver-aluminum

Vehicle Type: Aromatic polyisocyanate

Pigment Type: Carbon black, aluminum, proprietary anticorrosive compounds

Solvent Type: Aromatic naphtha, propylene glycol monomethyl ether

Flash Point: 105°F (41°C)

Solids by Weight: 76%

Solids by Volume: 71%

Recommended Dry Film: 3 - 4 mils total dry film thickness can be achieved in 2 coats thinly brushed or sprayed.

Coverage: 569 ft²/U.S. gallon (142 ft²/U.S. quart) at 2 mils dry film thickness on a smooth surface, 379 ft²/U.S. gallon (95 ft²/U.S. quart) at 3 mils dry. Coverage will vary depending on surface profile, application technique and porosity of substrate. Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

Viscosity at 75°F (24°C): 70 - 80 KU

Average Dry Time at 75°F (24°C): To touch: 1 - 2 hours, Tack free: 3 - 4 hours, Mar free: 5 - 6 hours, Full cure 24 - 48 hours

Time to Recoat: 4 - 24 hours.

Recommended Reducer: If reducing is required for spray application, Magnet S8 Multi Temperature Reducer may be added up to 10% by volume. DO NOT use solvents containing alcohol, mineral spirits or lacquer thinner.

Resistance To: Abrasion, impact, salt air, battery acid, gasoline, diesel fuel, solvents, chemicals, corrosives and temperature extremes.

Pot Life: Do not open until ready to use! Any moisture contamination of this product will cause hardening in the container. Pot life after opening will depend on moisture introduced to the product.

Shelf Life: Minimum 12 months in unopened containers.

Package: 1-Quart & 1 Gallon Cans, 5 Gallon Pails

Weight Per Gallon: 8.9 lbs.

VOC: Maximum VOC of 2.09 lbs per gallon of coating. (250 GPL)

Suitable Top Coats: MAGNET 4800 Series Synthetic Urethane Enamel, MAGNACRYL™ 9000 Series Acrylic Enamel or MAGNATRON™ 5000 Series Acrylic Polyurethane.

Performance Properties *

Initial Gloss, 60°	Black = 100	Silver-Aluminum = 30
Pencil Hardness	F	
Direct Impact, in/lbs.	125	
Reverse Impact, in/lbs.	45	
Acid Resistance	10	
Caustic Resistance	10	
Solvent Resistance	10	

* Minimum cure time - 7 days ambient: Acid, caustic and solvent resistance are rated on a scale of 10 - 1, with 10 equal to no effect after a 24 hour spot test. Solvents and substances tested include: MEK, Toluene, Naphtha, Grease, Diesel Fuel, Gasoline, Gasohol, and Road Tar. Acids tested with ratings of "10" include solutions of: 5% Sodium Hydroxide, 20% Hydrochloric Acid, 20% Phosphoric Acid, 5% Tannic Acid, 10% Sulfuric Acid.

LIMITED WARRANTY: Since the use and application of this product is beyond the control of the seller or manufacturer, the sole responsibility under this guarantee and under any other warranty or guarantee, expressed or implied, in connection with the sale and use of this material, shall be the return of the purchase price of this material or, at the seller's option, replacement of the material, if proven defective. Neither labor costs nor any consequential damages are covered by this limited warranty. This product is sold subject to the understanding that the buyer assumes all risks of use or handling which may result in loss or damage which are beyond the control of Magnet Paint & Shellac Co., Inc. or McGREYOR Coatings such as, incompatibility with other products and the manner of their use or application. NO OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE. The buyer and all users are deemed to have accepted the terms of this notice which may not be varied.