cohesive

SAFEMAG®/ULTRAMAG®

PREPARATION, USE AND CARE

- **Q.** Do vehicles need special preparation before applying SAFEMAG®/ULTRAMAG® signs?
- **A.** Make sure application area is perfectly clean, and dry prior to sign being placed. Check the back of the sign to make certain it is also free of debris.
- What is the best way to apply a magnetic Sign?
- A. Let one edge of the sign contact the vehicle in the desired position. Let the magnetic power to the work as it puts the sign into place from the edge where you started to the edge of the opposite side. If the sign is not exactly where you want it, peel it off, reposition the starting edge and repeat steps. Make sure that the entire surface of the sign is smooth against the vehicle with no air pockets underneath. During winter the temperature of the sign should be about 50 degrees F during installation, but the temperature of the vehicle surface does not matter.
- **Q.** Do any surfaces present problems?
- **A.** Care should be taken with wood grain paneling and metallic finishes. Such surfaces should be checked weekly for the first 90 days of use. Do not put signs on fresh paint work. Make certain the paint has cured before applying sign.
- What sign maintenance is recommended?
- A. Remove the sign every 3 4 days, cleaning and wiping dry both the magnetic side and the surface of the vehicle. This keeps moisture from collecting, which can potentially damage a vehicle's surface. Keep the sign free of road dirt and debris. Remove sign after snowfall and rain wipe dry.
- **Q.** What special precaution must be taken in storing signs?
- **A.** Avoid wrinkling by storing in a 3 inch diameter roll with the printed side out, or store the sign flat. Avoid curls or stress on the sign.
- Any additional tips or suggestions?
- Do not wash your vehicle with signs in place, vehicles using signs in areas of lawn chemical treatment, salt water spray, road salt etc, should be maintained as outlined.
 - Corner rounding prevents dog-eared corners.
 - Custom shapes should utilize rounded contours rather than sharp angles.

There is no warranty expressed or implied against loss of signs or damage to vehicle surfaces as factory has no control over how signs are cared for, altered, stored and/or used, or the surface to which the signs are applied.



SAFEMAG®/ULTRAMAG® TECHNICAL DATA SHEET

Typical Magnetic Properties

Properties	Anisotropic	
	CGS/U.S.	SI
Br	1,600 Gauss	160 mTesla
Нс	1,225 Oersteds	98 kA/m
Hci	2,000 Oersteds	5.0 kJ/m³
Temperature Coefficient of Br	-0.11 %/°F	
Temperature Coefficient of Hci	0.09 %/°F	
Peak Magnetizing	10,000 Oersteds	796 kA/m

Features

- Rubber bonded strontium ferrite magnet
- Made by calendaring and extrusion process
- Roll Goods
- Punched Parts
- Laminated with adhesives, paper or vinyl if desired
- Flexible permanent magnet
- Available magnetized or demagnetized; special patterns may require a magnetizing fixture
- Customer tooling; production

Typical Physical Properties

Properties	CGS/U.S	SI
Mechanical		
Tensile Strength ¹	780 psi	538 Ncm²
Elongation at Break (in) ¹	1.05	
Stiffness (0.090" x 0.75")	2.13	
Durometer	56 Shore D	
Density ³	3.6	
Electrical		
Volume Resistivity ⁴ (OHMS CM X 10 ¹³)	4.0	
Dielectric Strength5	250 v/mil	10 kv/mm
Thermal		
Maxiumum Contiuous	175° F	79° C
Operating Temperature ⁶ Thermal Coefficient of Linear Expansion (X 10-5/C) ⁷	4.9	
(X 10 3/C)-		

Test Methods

¹ASTM D-412

²ASTM D-747

³ASTM D-792

⁴ASTM D-257

⁵ASTM D-149

⁶Arnold Test Method

⁷ASTM D-696

^{*} All values shown are measured at 23°C (73°F).

^{**} All values are based on a standard test plug. Consult with an application engineer for more information on your specific requirements.

^{*} All values shown are typical and are not intended for specification purposes.

^{****}We have instituted manufacturing procedures designed to restrict the use of hazardous substances. To the best of our knowledge, this product is in compliance with EU Directive 2002/95/EC with respect to lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE). Notwithstanding the foregoing, we make no warranty as to the fitness of this product for any purpose.