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**TYPICAL USES OF
MAGNESIUM SULFATE (Epsom Salt)
October 27, 2008**

ADHESIVES: Setting agent and extender in protein base glue, setting agent in low fume area formaldehyde resin used in wafer and chipboard.

AGRICULTURE: Micronutrient for addition to fertilizer or for use as a foliar spray.

ANIMAL HEALTH AND FEED: Dietary supplement, laxative.

BUILDING MATERIALS: Used in magnesium oxysulfate cements for roofing panels and wallboard, and as an ingredient in flame retardant coatings, effloresces brick.

CATALYSTS (Specialty): Source of magnesium ion.

COSMETICS: Used in hair wave neutralizer solutions and hair "densifier" products.

DETERGENTS AND SOAPS: *Bar Soaps: To prevent shrinking and cracking, magnesium tallowate.*
Light Duty Liquid Detergents: Foam stabilizer and densifier, viscosity control agent
Heavy Duty Laundry Detergents: Source of magnesium ion, useful in zeolite – $MgSO_4$ builder systems, foam stabilizer, source for synthetic magnesium water hardness, anti-caking agent.

ENZYME STABILIZER: Brewery, high fructose, antibiotic, high fructose corn, cheese production.

FERMENTATION PROCESSES: Magnesium ion source in yeast and antibiotic production.

FUEL OIL ADDITIVES: Sulfur and magnesium based conditioner, and sulfate ion source.

HIGH-FRUCTOSE CORN SYRUP PRODUCTION: Enzyme Stabilizer.

LATEX AND RUBBER PROCESSING: Coagulating agent.

LEATHER PROCESSING: Weighting agent.

MAGNESIUM BISULFITE, MAGNESIUM SILICATE, MAGNESIUM TRISILICATE PRODUCTION: Raw material.

MEDICINAL: Analgesic soaking agent for bruises and sprains.

PHARMACEUTICAL: Magnesium hydroxide production.

PLATING: To precipitate heavy metals out of water.

PULP AND PAPER: Stabilizing agent for oxygen and peroxide bleaching operations, drainage aid, pulping additive, dye stabilizer, water hardening agent.

REFRACTORY MANUFACTURING: Magnesium oxysulfate binder in bricks, pore filler in chromesite bricks, specialty cement formulations, coloring agent.

STAINLESS FLATWARE: As a filler in hollow handles.

STEEL PRODUCTION: Salt bath for brightening and zinc plating.

TEXTILES: Stabilizing agent for peroxide bleaching, mordant in dyeing and printing, weighting agent for silk and cotton.

TITANIUM DIOXIDE PRODUCTION: Flocculating agent.

WATER TREATMENT: Removal of heavy metals, hardener.

ZINC PROCESSING: Color stabilizer, filtering aid.

MISCELLANEOUS: Artificial snow, explosives, magnesium stearate, magnesium sulfonate, photographic solutions.

PRODUCERS OF MAGNESIUM SULFATE SINCE 1950