Product Safety Assessment

PRIMAL™ Dispersions Used as Leather Penetration Binders and Aids


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Names
• PRIMAL™ FGR dispersion
• PRIMAL LT 2000 dispersion
• PRIMAL Penetrator SF-15 dispersion
• PRIMAL Prebottom VE-N dispersion
• PRIMAL LT 76 dispersion

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Product Overview
• PRIMAL™ dispersions used as leather penetration binders and aids are acrylic resins dispersed in water manufactured by Rohm and Haas Company, a wholly owned subsidiary of The Dow Chemical Company, and its affiliated companies.¹,²,³,⁴ For further information, see Product Description.
• These PRIMAL dispersions are used in the leather industry to enhance the finish of soft, full-grain, or corrected-grain leathers.⁵ For further information, see Product Uses.
• Worker exposure to these PRIMAL dispersions is possible during manufacture, transport, or application. Exposure is minimized through engineering controls and the use of personal protective equipment. These PRIMAL dispersions may be present in dried and cured form in consumer products such as leather furniture, clothing, car upholstery, and shoes. Dried and cured products are not considered to present a risk to individuals.⁶ For further information, see Exposure Potential.
• In the industrial setting, direct eye contact, prolonged or repeated skin contact, or inhalation of vapor or mist can cause irritation.⁷ For further information, see Health Information.
• The acrylic resins in these PRIMAL dispersions are expected to degrade slowly in the environment. The resins are not expected to accumulate in the food chain due to their high molecular weight and are not expected to be toxic to fish and other aquatic organisms. For further information, see Environmental Information.
• These PRIMAL dispersions are stable under recommended storage and normal use conditions.⁸ For further information, see Physical Hazard Information.

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Manufacture of Product

- **Locations** – Rohm and Haas Company, a wholly owned subsidiary of The Dow Chemical Company, and its affiliated companies manufacture PRIMAL™ acrylic dispersions in various global locations.
- **Process** – These PRIMAL dispersions are produced using proprietary Rohm and Haas raw materials and technologies.

Product Description

PRIMAL™ dispersions used as leather penetration binders and aids are acrylic resins dispersed in water. Most are translucent liquid products that contain 22% to 24% solids and have an ammonia-like odor.

Product Uses

These PRIMAL™ dispersions are used to treat soft, full-grain leathers. They can also be used to enhance adhesion to full-grain and corrected-grain leathers. These products have excellent penetrating capabilities, making them useful as tack-free penetrating components in basecoat formulations. Leathers treated with these products may be used in the following applications:
- Automotive upholstery
- Furniture
- Clothing
- Footwear

Exposure Potential

These PRIMAL™ dispersions are used in the production of industrial and consumer products. Based on the uses for this product, individuals could be exposed through:

- **Workplace exposure** – PRIMAL dispersions are manufactured in closed systems using engineering controls to help prevent the escape of liquid or vapors and help minimize release to the environment. The potential for exposure is further reduced by proper use of personal protective equipment. Workers who manufacture or formulate this product may be exposed during maintenance, sampling, testing, or other procedures. Worker exposure could also occur during leather processing. Each facility should have a thorough training program for employees and appropriate work processes, ventilation, and safety equipment in place to limit exposure. See Health Information.

- **Consumer exposure to products containing PRIMAL dispersions** – These PRIMAL dispersions are not sold directly to consumers; however, leather goods used by consumers may incorporate these products in dried and cured form. Contact with the dried and cured products is not considered to present a risk to consumers. See Health Information.

- **Environmental releases** – Small quantities of these products may be released into the environment during processing. If released, the acrylic resins will tend to float in water and will be removed in biological wastewater-treatment facilities by adsorption to biosolids. In the event of a spill, the focus is on containing the spill to prevent contamination of soil, surface water, or groundwater. Absorb small spills with inert materials such as sand or soil. See Environmental, Health, and Physical Hazard Information.

- **Large release** – Industrial spills or releases are infrequent and generally contained. If a large spill does occur, keep people upwind and away from the spill or leak. Wear appropriate personal protective equipment. Contain spilled material with sand or earth. Spilled product can create slippery conditions. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. See Environmental, Health, and Physical Hazard Information.

- **In case of fire** – These products are noncombustible until evaporated to dryness. However, dried product residue can burn. Use extinguishing media appropriate for the surrounding fire. Firefighters should wear positive-pressure, self-contained breathing apparatus (SCBA) and protective firefighting clothing. Follow emergency procedures carefully. See Environmental, Health, and Physical Hazard Information.

For more information, request the relevant Safety Data Sheet from the Dow Customer Information Group.
Health Information

Eye contact – Direct contact can cause slight irritation.

Skin contact – Prolonged or repeated contact can cause slight irritation.

Inhalation – Inhalation of vapor or mist can cause irritation of the nose, throat, and lungs, as well as headache and nausea.

For more information, request the relevant Safety Data Sheet from the Dow Customer Information Group.

Environmental Information

PRIMAL™ dispersions used as leather penetration binders and aids are acrylic resins dispersed in water. The resins are insoluble in water and have low volatility. If released, the resins would initially remain dispersed in water, but would eventually bind to soil, suspended solids, or sediment. Although acrylic resins are not biodegradable, they would be expected to slowly degrade in the environment, including degradation by physical action or by exposure to sunlight. The resins will be removed in biological wastewater-treatment facilities by adsorption to biosolids.

Because of their high molecular weight and low water solubility, the acrylic resins in these PRIMAL dispersions would not be expected to accumulate in the food chain (low bioconcentration potential), and they are not expected to be toxic to fish or other aquatic organisms on an acute basis.

For more information, request the relevant Safety Data Sheet from the Dow Customer Information Group.

Physical Hazard Information

These PRIMAL™ dispersions are stable under recommended storage and normal use conditions. There are no known materials that are incompatible with these products. These products will not undergo polymerization.

For more information, request the relevant Safety Data Sheet from the Dow Customer Information Group.

Regulatory Information

Regulations may exist that govern the manufacture, sale, transportation, use, and/or disposal of PRIMAL™ dispersions. These regulations may vary by city, state, country, or geographic region. Information may be found by consulting the relevant Safety Data Sheet, Technical Data Sheet, or Contact Us.

Additional Information

- Request the relevant Safety Data Sheet from the Dow Customer Information Group (www.dow.com/assistance/dowcig.htm)
- Contact Us (www.dow.com/assistance/thoughts.htm)
- PRIMAL™ Prebottom VE-N Acrylic [Dispersion], Technical Data Sheet, Rohm and Haas Company, April 2008 (www.dow.com/assets/Dispens/primal_for_leather_product/primal_prebottom_ve-n)

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For more business information about PRIMAL™ dispersions used as leather penetration binders and aids, visit the PRIMAL for Leather web page at www.dow.com/products/product_line_detail.page?product-line=1120315.

References
1 PRIMAL™ FGR [Dispersion], Technical Data Sheet, Rohm and Haas Company, November 2000, page 1.
5 PRIMAL™ FGR [Dispersion], Technical Data Sheet, Rohm and Haas Company, November 2000, page 1.
6 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Exposure Controls/Personal Protection.
7 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Hazards Identification and Toxicological Information.
8 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Stability and Reactivity.
9 PRIMAL™ FGR [Dispersion], Technical Data Sheet, Rohm and Haas Company, November 2000, page 1.
15 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Hazards Identification and Toxicological Information.
16 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Ecological Information.
17 PRIMAL™ FGR [Dispersion], Material Safety Data Sheet, Rohm and Haas Company, August 5, 2004, Stability and Reactivity.
NOTICES

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Form No. 233-01016-MM-0613