OMNOVA SOLUTIONS INC. | Specialty Chemicals

SYNTHETIC LATEX APPLICATION GUIDE FOR RUBBERIZED SPORTS SURFACES



OMNOVA LATEX FOR SPORTS SURFACES

- Water based latex emulsions
- Water based; easy cleanup
- Easily diluted with water
- Solvent free
- Very stable; minimizes clogging and fouling of application equipment

OMNOVA Solutions is a major supplier of styrene butadiene latex binders and acrylic topcoats to the sports surfaces market for use in the construction of rubberized running tracks, walking paths and standing platforms. Latexbound tracks provide good performance and durability. Latex systems can be installed in multiple layers or in a single layer, creating a permeable, resilient surface. The standard color is black, but other colors are available with the addition of pigments to the latex.

Over the past two decades, OMNOVA Solutions' styrene butadiene latex and acrylic emulsions have been used to build and install hundreds of rubberized running tracks throughout North America.

The OMNOVA Solutions' product portfolio includes:

- **GenFlo® 3088** for tack coat
- **GenFlo 3966** or **GenFlo 3976** for rubber binder
- **AcryGen® D471** for topcoat

Member of: AMERICAN SPORTS BUILDERS ASSOCIATION — Build it Right

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Consult a Design Professional

It is important to employ a design professional to assist in planning, building or renovating a track facility. A professional architect, engineer or landscape architect, or a knowledgeable contractor, trained and experienced in track construction, will help you identify your needs and specific site requirements.

Site Preparation

Prepare the track surface by paving at least 2" of asphalt over the existing area or on top of a foundation of compacted gravel. The asphalt should be allowed to cure and off gas for at least two weeks prior to track construction.

Track Construction

Today, many tracks are constructed of rubber particles bound with latex. Coat an asphalt or concrete asphalt base surface with a "tack coat" of **GenFlo 3088** latex to enhance the adhesion of the first layer of rubber to the asphalt.

Evenly spread rubberized granules (including recycled EPDM) or strands of rubber over the tack coat. Spray either **GenFlo 3966** or **GenFlo 3976** latex binder over the rubber layer. The latex should air dry, and its surface should no longer be milky, prior to installation of second rubber layer. Apply subsequent layers of rubber and latex binder, allowing each layer to dry fully until reaching the desired track thickness. The latex surface is typically installed to a depth of 3/8" to 1/2". Typical usage is five layers for granule rubber particles (including recycled EPDM) or seven layers for strand rubber.

An optional latex spray coat, mixed with carbon black liquid, can then be applied to give a dark black appearance and UV resistance. Contact OMNOVA for instructions for other colors.

AcryGen D471 acrylic latex is applied as a top coat to provide excellent UV resistance and sheen to the top surface of the track. The track may take up to twenty-four hours to dry after the top coat is applied, depending on weather conditions and humidity.

Note: If there is a risk of rainfall, it is advisable to postpone construction. The latex may be washed away before drying. If temperature drops below 50˚F during track construction, latex performance may be compromised.

For additional information on track construction, please see the American Sports Builders Association website at www.sportsbuilders.org.

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GenFlo 3966 and GenFlo 3976 Usage Guidelines

# of Lanes	Dry Latex[1] (approx.)	Drums of Latex[2] (approx.)	Track Surface	Rubber Level	Track Thickness
6	15,000 lbs. 6,818 kg	65	5200 yd^2 4348 m^2	10.5-11 lbs./yd^2 5.7-6.0 kg/m^2	1/2″ 1.27 cm
8	19,000 lbs. 8,636 kg	85	6700 yd^2 5602 m^2	10.5-11 lbs./yd^2 5.7-6.0 kg/m^2	1/2″ 1.27 cm
6	12,500 lbs. 5,682 kg	55	5200 yd^2 4348 m^2	9.0-9.5 lbs./yd^2 4.9-5.2 kg/m^2	3/8″ 0.95 cm
8	14,000 lbs. 6,364 kg	73	6700 yd^2 5602 m^2	9.0-9.5 lbs./yd^2 4.9-5.2 kg/m^2	3/8″ 0.95 cm

[1] Final track composition should be 12.5 % dry latex by weight to ensure adequate performance
[2] Dilution ratio of all latexes can be from 1:1 to 3:1, latex to water. Insufficient rubber bond may require the higher latex ratio.

Coverage Guidelines[1]

Chemical	Useage	Track Thickness	Wet Latex
GenFlo 3088	Tack Coat	N/A	0.1 gallons/yd^2 0.45 L/m^2
GenFlo 3966	Binder	1/2″ 1.27 cm	0.75 gallons/yd^2 3.40 L/m^2
		3/8″ 0.95 cm	0.60 gallons/yd^2 2.70 L/m^2
GenFlo 3976	Binder	1/2″ 1.27 cm	0.75 gallons/yd^2 3.40 L/m^2
		3/8″ 0.95 cm	0.60 gallons/yd^2 2.70 L/m^2
AcryGen D471	Top Coat	N/A	0.2 gallons/yd^2 0.95 L/m^2

[1] Coverage levels are estimates. Exact amount required will vary depending on type of rubber used, weather conditions, spraying pattern, etc.

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SYNTHETIC LATEX PORTFOLIO FOR SPORTS SURFACES

PRODUCT	TOTAL SOLIDS % by Weight	SURFACE TENSION (dynes/cm)	pH	BROOKFIELD VISCOSITY (cps)	T_g	PROPERTIES	APPLICATIONS
GenFlo® 3088	47.5 - 50.5	40 - 52	7 - 8	< 250	-50°C	High tack SB latex adhesive. Very soft.	Primer or initial tack coat
GenFlo® 3966	50 - 54	36 - 57	7 - 9	< 250	5°C	SB latex polymer. Tends to stay on top and build adhesion layer by layer. Workhorse for all layers.	Binder
GenFlo® 3976	47 - 49	36 - 57	7 - 9	< 150	5°C	SB latex polymer. Tends to stay on top and build adhesion layer by layer. Workhorse for all layers.	Binder
AcryGen® D471	49 - 51	35 - 45	9 - 10	< 500	7°C	Stiff, strong and durable acrylic emulsion coating. UV and weather resistant.	Topcoat

The OMNOVA ADVANTAGE

OMNOVA Solutions Inc. is a leading innovator of emulsion polymers and specialty chemicals used as binders, coatings, adhesives and additives that provide your products with significant performance features.

Customized solutions.
Whether taking a traditional chemistry to an advanced level of performance or developing a product for an entirely new application, we pride ourselves on being able to develop just the right product for your needs.

Responsiveness and speed.
With an industry-best, dedicated technical service team, we actively monitor our products' performance in your production setting and quickly respond if adjustments are needed.

Capabilities.
Five chemical manufacturing plants, two technology centers, a pilot plant and a pilot paper coater are strategically located in North America for your convenience and optimum efficiency. In addition, we have business offices and manufacturing capabilities in Europe and Asia.

To learn more about this product, or any other of OMNOVA Solutions' chemicals, please contact us at:

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