

PRODUCT NAME

PRO-tektus – Plastics Flame Retardant



MANUFACTURER

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PRODUCT IDENTIFICATION

PRO-tektus – Plastics Flame Retardant is a special clear fire retardant formula designed to protect plastics, Styrofoam, PU foam, Polystyrene and more. It is a clear top-coat.

PRO-tektus – Plastics Flame Retardant has a strong odor. If treated item is kept indoors, then retardancy remains effective indefinitely.

PRO-tektus – Plastics Flame Retardant is an intumescent clear coat, which can go over the top of painted or sealed surfaces. It creates a thick layer of char when exposed to flame, protecting the substrate.

FEATURES

- Helps Prevent Spread of Dangerous Flames.
- Inhibits Toxic Smoke Development.
- Cuts down Mold Growth & Termites.
- Preserves plastics.
- Easy to apply.
- Safe to Store.
- Compatible with Plastics, Styrofoam, Polyurethane foam, Polystyrene and more.

APPLICATION

PRO-tektus – Plastics Flame Retardant is used to treat materials and surfaces such as:

- Pressurized plastics.
- Composite piping systems.
- Electrical and Electronic components.
- Pre-construction plastic panels.
- Building & Construction materials.
- Automotive.
- Aviation.
- Packing materials.
- Shipping pallets....

COVERAGE RATE for plastics per coat

QUANTITY	APPROX. COVERAGE	
Quart Sprayer	Up to 262.50 Sq Ft.	Up to 24.38 m ²
1 Gallon	Up to 1050 Sq Ft.	Up to 97.54 m ²
5 Gallon Pail	Up to 5250 Sq Ft.	Up to 487.70 m ²
55 Gallon Drum	Up to 57,750 Sq Ft.	Up to 5364.70 m ²

FINISH COVERAGE for plastics RATE per coat

QUANTITY	APPROX. COVERAGE	
Quart Sprayer	Up to 87.50 Sq Ft.	Up to 8.13 m ²
1 Gallon	Up to 350 Sq Ft.	Up to 32.51 m ²
5 Gallon Pail	Up to 5250 Sq Ft.	Up to 162.55 m ²
55 Gallon Drum	Up to 57,750 Sq Ft.	Up to 1788.05 m ²

Number of PRO-tektus – Plastics Flame Retardant coats: 3
Final coverage rate 350 ft²/gallon (32.50 m²/gallon).

Approx. coverage varies according to material thickness and density.
For best results, it is recommended to treat all sides of material.

PRODUCT DATA SHEET

COVERAGE RATE for Styrofoam, polyurethane foam, polystyrene... per coat

QUANTITY	APPROX. COVERAGE	
Quart Sprayer	Up to 150 Sq Ft.	Up to 13.90 m ²
1 Gallon	Up to 600 Sq Ft.	Up to 55.70 m ²
5 Gallon Pail	Up to 3000 Sq Ft.	Up to 278.50 m ²
55 Gallon Drum	Up to 33000 Sq Ft.	Up to 3063.50 m ²

Number of PRO-tektus – Plastics Flame Retardant coats: 3
Final coverage rate 200 ft²/gallon. (18.5 m²/gallon)

DIRECTIONS

Evenly distribute **PRO-tektus – Plastics Flame Retardant** on the item or surface being treated, let dry, and repeat as needed. **PRO-tektus – Plastics Flame Retardant** is water based, clear liquid that becomes insoluble when dry. Over-coated **PRO-tektus – Plastics Flame Retardant** is an excellent primer for use under or over latex paints. Be sure surface is clean and dry before treating. Apply with sprayer head held at 8 to 12 inches (20 to 30 cm) from surface. Be sure to allow for complete drying between two coats. Drying time depends on ambient temperature and humidity. If spraying onto a vertical surface where drain off is possible, multiple applications may be necessary.

In all applications, allow **PRO-tektus – Plastics Flame Retardant** to completely air-dry before re-applying.

When used in exterior application, **PRO-tektus – Plastics Flame Retardant** stays efficient for 3 years or 200 inches (78 cm) of rain, whichever comes first.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance & Color	Liquid clear Colour.
Specific gravity @ 15°C	Not determined.
Odor & Odor threshold	Yes - Moderate
pH	2.8 – 3.4 (± 0.5)
Flash point	Non Flammable.
Water Solubility	Soluble in liquid state.
Shelf Life	2 years in closed containers between 7°C & 38°C (45°F – 100°F)
Boiling Point	100 °C (212 °F)
Vapour Pressure @ 20°C	mm Hg (@ 68°F) 17
Explosion Limits	Not applicable.
Solvent Content	0.0%
Flammability(solid, gas)	Not applicable.

STABILITY AND REACTIVITY

Stability	Stable at normal storage conditions.
Incompatibility	Strong oxidizers, alkalis or acids. (materials to avoid)
Hazardous	No dangerous reaction known.
Decomposition Products	

ECOLOGICAL INFORMATION

PBT & vPvB assessments	Not applicable
Disposal	Smaller quantities can be disposed of with household waste. Disposal must be made according to official regulations.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection	Use NIOSH/MSHA approved respirator suitable for use with inorganic acids and organic vapors if proper ventilation can not be provided.
Ventilation	No special ventilation is required.
Protective Gloves	Wear impervious gloves as necessary to avoid contact, rubber, or neoprene
Eye Protection	Protective glasses or goggles.
Hygienic Practices	Do not ingest, do not splash into eyes, do not inhale for prolonged periods.

The information and data given is to the best of our knowledge reliable, but is given without obligation.

STANDARDS & NORMS

PRO-tektus – Plastics Flame Retardant conforms to:
ASTM F1173-95 , NFPA 701 , ASTM E84 & Extended E84
FIRE RETARDANT COATING.

QUALITY STANDARDS

PRO-tektus – Plastics Flame Retardant conforms to ISO 9001.

EQUIPMENT

Apply with brush, roller or airless spray.

STORAGE AND HANDLING

- ✓ Keep from freezing.
- ✓ Store in a cool, dry place.
- ✓ Always seal container after dispensing.
- ✓ Do not alter or mix with other chemicals.
- ✓ Published shelf life assumes upright storage of factory-sealed containers in a dry place.
- ✓ Maintain temperature of 45 - 100°F (7°C – 38°C).
- ✓ Do not double stack pallets.
- ✓ Dispose of unused product and container in accordance with local, state and federal regulations.
- ✓ When handling bulk concentrate, eye protection, gloves, and impervious clothing should be worn when there is a danger of splashing, prolonged exposure to vapor, or prolonged skin contact, as with all chemicals.
- ✓ It is neutral. It will remove oil from the skin and will irritate the eyes if sprayed directly into them.
- ✓ Do not ingest, splash into eyes, or inhale for long periods.

Other Precautions: Although components have low hazard levels, the product will remove oils from the skin like common soap. Avoid prolonged skin contact.

TIPS FOR APPLICATION

Plastics vary depending on type and manufacturing process. You may need to scuff the surface to give it some 'tooth' for the coating to adhere. Sometimes, an adhesion promoter may need to be used. These are easily available in auto parts stores. You may need to apply a misted or 'flash' coat, so that it is just tiny little droplets that the second coat can adhere better. Often, multiple light coats will work better than a single thick coat. Due to its hygroscopic nature, if a single coating is too thick, it will have trouble drying, and may slough off.

ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures	Rinse affected area with water. Will not harm the environment.
Waste Disposal Method	Disposal must be made according to official regulations.

FIRST AID MEASURES

- **General information:** Phosphoric acid vapors may cause irritation and inflammation of eyes and mucous membranes of the upper respiratory tract. Repeated skin contact may cause skin irritation, dermatitis or other allergic reactions.
- **After Inhalation:** Remove to fresh air immediately. Give oxygen or artificial respiration if necessary. Seek medical attention if necessary. Use adequate ventilation
- **After Skin Contact:** Remove contaminated clothing. Promptly wash skin thoroughly with large quantities of soap and water for at least 5 minutes. If irritation persists, consult a physician. Launder contaminated clothing before use.
- **After eye contact:** Rinse immediately with water. Remove contact lenses, then flush eyes immediately with running water for at least 15 minutes. Examination by a physician is imperative.
- **After swallowing:** Induce vomiting immediately by giving a tablespoon of salt in a glass of warm water and repeat until fluid is clear. Call a physician. Never give anything by mouth to an unconscious person.
- **Most Important symptoms and effect, both acute and delayed:** Severe exposure may cause nausea, pulmonary irritation and loss of consciousness. May be fatal if swallowed. Prolonged contact with skin may cause reddening of affected area. Direct contact with the eyes causes redness, pain, conjunctivitis and with severe exposure possible corneal destruction. Vapors may cause pulmonary irritation and redness of the eyes.
- **Indication of any immediate medical attention and special treatment needed.**

FIRE-FIGHTING MEASURES

- Extinguishing media.
- Suitable extinguishing agents: Not combustible. Use water spray, dry chemical, alcohol foam, carbon dioxide or other agents as appropriate for materials in surrounding fire.
- Special hazards arising from the substance or mixture: May liberate hydrogen gas upon contact with some non-ferrous metals. Protect personnel against mist, vapor or splashes.
- Advice for firefighters: Use self-contained breathing apparatus and protection for skin. Use water spray to keep storage containers cool. Use safety equipment and clothing which is suitable for phosphoric acid and materials in surrounding fire.
- Protective equipment: Use self-contained breathing apparatus and protection for skin. Use water spray to keep storage containers cool. Use safety equipment and clothing which is suitable for phosphoric acid and materials in surrounding fire.

COMPOSITION / INFORMATION ON INGREDIENTS

Mixture of the substances listed below with phosphoric hazardous additions.

RETARDING POWER

After treatment of **PRO-tektus – Plastics Flame Retardant** on most absorbent surfaces, there is zero flame spread. Flame Rating Classification: 0-25

CAUTION

- ❖ Do not dilute or mix **PRO-tektus – Plastics Flame Retardant** with any product.
- ❖ **PRO-tektus – Plastics Flame Retardant** MUST NOT be thinned or diluted.
- ❖ **PRO-tektus – Plastics Flame Retardant** must not freeze.

TECHNICAL SERVICE

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

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PRODUCT WARNING

Société Raymond Barakeh SAL has no control over the use or storage of this product and therefore does not accept any liability in this regard. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, user shall determine the suitability of the product for their intended use, and user assumes all risk and liability whatsoever in connection therewith. If product is tamper evident, do not use and contact an authorized dealer immediately. Any verbal advice given should not be regarded as authoritative information. This information is subject to change without notice, therefore all applicators should ensure they have current information. This product is intended for the use only of skilled tradesmen and where applicable, statutory licensed tradesmen experienced and trained in the use of this product. This product is warranted to be of uniform quality within the manufacturer's tolerance. This manufacturer has no control over the use or misuse of this product, therefore no warranty rests or implied, is or can be made either as to the effects of such use. The manufacturer's obligations shall be limited to replacing product proving to be defective.



APPLICATIONS

- Plastic.
- Styrofoam.
- Polyurethane foam.
- Polyethylene & more.

DIRECTIONS FOR USE
Shake well to disperse concentrated product.

STORAGE
Store in warm dry conditions.
Temperature 7°C - 38°C
Protect from frost.

APPLICABLE STANDARDS
NFPA 701, ASTM F1173-05,
ASTM E84 & Extended E84

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PRO-tektus

**FIRE RETARDANT COATING
for PLASTICS**
EXTERIOR - INTERIOR USES

- Helps prevent spread of dangerous flames.
- Keep Out of Reach Of Children.
- In Case of Contact with Eyes, Rinse immediately with plenty of Clean Water & Seek Medical Advice.
- Inhibits toxic smoke development.
- If Swallowed Seek Medical Advice, Show the Container or Label.
- Non-Toxic, Eco-Friendly.
- NO PBDE's or Toxins.
- Discourages Mold Growth & Termites.

