

WELCOME TO THE LAUNCH OF SFAI



Spray Foam Alliance of India

May 25, 2016

**COME JOIN THE ENERGY
CHAMPIONS:
SFAI**



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Who is SFAI?

Why Spray Polyurethane Foam?

Spray Polyurethane Foam Product Training Certification Program

Spray Polyurethane Foam Enhanced Product Stewardship Program

Conclusions



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- SFAI is the arm of the IPUA to promote and proactively ensure the safe usage of spray polyurethane foam in b & c industry through a certification program, in collaboration with BEE & ITIs

Who is SFAI





- SFAI is the voice of the polyurethane industry in relation to the Spray Foam application in building & construction industry
- SFAI promotes the value of polyurethane spray foam in its end use applications as an essential material for helping to build a sustainable future in cooperation with downstream industry organizations.
- It instructs on the safe use of SPF in order to ensure its growth in the country.
- SFAI coordinates on key industry activities with IPUA & the Stakeholders in the B & C segment.

SFAI Mission



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Why?



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- The woe of air leaks

WHY SPRAY POLYURETHANE FOAM?



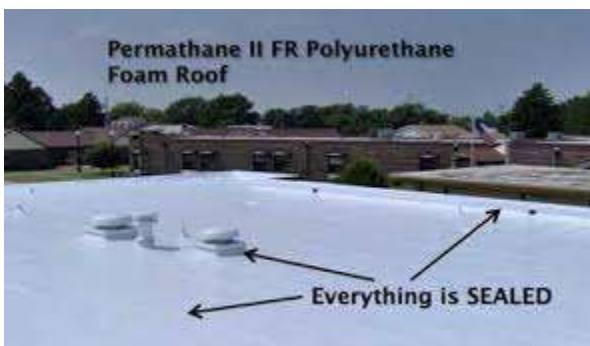
Spray polyurethane foam (SPF) plays a **valuable and effective role** in helping meet energy efficiency goals.





Examples

- Globally found economically, socially & environmentally beneficial



Benefits of Spray Foam Insulation

- › Stops Air Infiltration
- › Moisture Resistant/ Eliminates mold
- › Saves up to 40% on Energy bills
- › Adds Structural Strength
- › Environmentally friendly
- › Increase comfort of your home
- › Reduces wear and tear on HVAC equipment



Waterproofing alone is not enough

- Insulation has negligible thermal mass which results in low conductivity
 - Therefore a waterproofing on insulation is much more stable due to low expansion and contraction, unlike brick & mortar



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- Overview
- Applications Chemistry
- Equipment
 - Introduction
 - Primary Heaters & Heated Hose
 - Spray guns
 - Pumps & Drives
- Application
- Retrofit
- Troubleshooting
- CPI Training Materials

Product Training Certification Program



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- PRIMARY GOAL
- *TO INCREASE UNDERSTANDING OF SAFE INSTALLATION PRACTICES REGARDING USE, HANDLING AND DISPOSAL OF SPRAY POLYURETHANE FOAM.*





- To be launched in 2016 by IPUA and the Spray Polyurethane Foam Alliance.
- Program to have both a worker focus and consumer / building occupant focus
- Initial worker focus (2016) is to improve understanding among workers handling high pressure spray polyurethane foam chemical ingredients. This will later focus on workers handling low pressure spray polyurethane foam chemical ingredients.

Industry-Led Enhanced SPF Product Stewardship Program



Roadmap SPF: Posters



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- www.sprayfoamallianceofindia.com



Roadmap SPF: Guidance



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■ www.sprayfoamalliance.com

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Exterior Spray Polyurethane Foam Insulation Health & Safety Q&A

For Spray Foam Contractors

What are the potential health hazards of SPF chemicals?

Are there

Chemical exposures can result in irritation of the skin, eyes and nose, including watery eyes, nose bleeds, coughing, tightness in the chest, and dizziness or lightheadedness. Inhalation of spray polyurethane foam can irritate the respiratory tract, including the nose, throat, and lungs. Some individuals may experience allergic reactions to the isocyanate component of the foam. Some individuals may experience allergic reactions to the polyurethane component of the foam.



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Hazard Communication for Spray Polyurethane Foam Insulation Applications

OSHA Standard 29 CFR 1910.1201
OSHA Standard 29 CFR 1960

Do you have a hazard communication program for employees or contractors who are using SPF?

Overview
The Standard was developed to provide employers and employees with information on how to identify and label hazardous chemicals in the workplace.

The Standard

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Exterior Applications Using Spray Polyurethane Foam Containing MDI/PMDI: Seven Important Points for Spray Polyurethane Foam Contractors

Here are seven important points you will want to know when applying spray polyurethane foam (SPF) containing methylene diphenyl diisocyanate (MDI) and polyurethane foam (PUF) containing methylene diphenyl diisocyanate (MDI).

1. What is MDI?

The acronym MDI was derived from one of the chemical names, methylene diphenyl diisocyanate. However, MDI is a class of methylene diisocyanate (MDI) and polyurethane foam (PUF) and polyurethane foam (PUF) and polyurethane foam (PUF).



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Interior Spray Polyurethane Foam Insulation Health & Safety Q&A

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"Green" Marketing Claims and Spray Polyurethane Foam

SPF polyurethane foam (SPF) is a leading insulation product due to its superior R-value for its thickness. Among its many marketing features are claims that could be verified by consumers to be "green" attributes. For example, some SPF is made in part with recycled cells, giving it many green attributes. Some SPF is also made with recycled content. Some SPF is also made with recycled content.

Are these attributes on the label of environmental marketing claims that can be verified?

For the label to provide accurate and verifiable marketing claims, manufacturers and distributors must have verifiable information to support their claims.

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Indoor Commercial and Residential Insulation Using Spray Polyurethane Foam Containing MDI/PMDI: Seven Important Points for Spray Polyurethane Foam Contractors

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Roadmap SPF Health and Safety Website



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- www.sprayfoamallianceofindia.com



Roadmap Worker Training



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- Short Term: Existing Worker Training and Testing Module
 - Updated existing training workbook, presentation, and test questions – will be made available on SFAI website.
 - Engaged third party contractor organizations with existing training programs for rapid deployment.
 - Engaged individual companies (e.g. Systems Houses) and others with training programs or conducting online training, to implement or disseminate SFAI's materials into their existing training programs or to their contractor community.



urethane.com



Roadmap Worker Training



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- Additional Guidance

- Ventilation Guide
 - Provided contractors with options on how to set-up an effective containment and ventilation for removal of SPF chemicals during and after application.

- Respirator Selection Guide
 - Technical guidance on the selection of a respirator and accessories and cartridge change-out schedules.
 - Papers presented yearly at SFAI's Polyurethanes Technical Conferences.

- Translations
 - Available in English and Hindi



- Developed website portals for professional SPF contractors, weatherization professionals, do-it-yourselfers (DIY), and homeowners to help answer key questions:
 - Potential exposures to polyurethane raw materials during cutting or trimming of foam
 - Re-occupancy times / ventilation techniques
 - Questions on installed product
 - High pressure and low pressure applicator guidance, frequently asked questions, etc.
 - Marketing claims guidance
 - Additional Resources
- Communicated health and safety information on installing SPF.

Consumer Outreach

WWW.SPRAYPOLYURETHANE.COM



AGENCY	ACTION
BEE	<ul style="list-style-type: none"><input type="checkbox"/> Launch Positive Action Plans (MDI/TDI)<input type="checkbox"/> Incorporate new website pages on safe use of SPF.
ITIs	<ul style="list-style-type: none"><input type="checkbox"/> Launch Training & Entrepreneurship Program<input type="checkbox"/> Develop & impart guidance for 1 and 2-component SPF.<input type="checkbox"/> Existing and new local emphasis programs ; uptick in enforcement.<input type="checkbox"/> Targeted workers to reduce or eliminate potential exposures to SPF chemicals.
NSDC	<ul style="list-style-type: none"><input type="checkbox"/> Specific recognition
NCL Virtual Center	<ul style="list-style-type: none"><input type="checkbox"/> Lead research to develop a method for measuring total isocyanates, collect worker exposure data, and support research on ventilation techniques.



- Develop outreach and educational programs on health and safety issues
- Clearly distinguish in all communications the differences between a fully reacted or “inert” product and an unreacted product.
- Educate consumers on differences between types of foams and potential exposures associated with each type.
- Integrate the polyurethane value chain to provide and disseminate health and safety information throughout the industry.

**How we do what
we do**



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- SFAI represents all of the major system houses, so they are perfectly positioned to lead the industry and take action on **technical, health and safety issues**.
- Engagement on health and safety issues with regulatory agencies has many benefits.
- Polyurethane raw materials can be used safely when worker health and safety is integrated into everyday workplace practices.
- SFAI continues to update materials and programs regularly.

Conclusions



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Launch of SFAI

May 25, 2016

Pune

Simultaneous 1st Training Program

May 26, 2016



Growth with
safety!

Thank you!