



**SMOKE SUPPRESSANTS**

For Rigid and Flexible PVC



- **Robust Organic Char Former, Lowering Heat and Smoke Release**
- **Cost-Effective and Efficacious vs. Ammonium Octamolybdate (AOM)**
- **Patented Molybdate Technology**



NON-HALOGEN  
FIRE RETARDANT ADDITIVES



For Rigid and Flexible PVC

**Huber Engineered Materials has the ideal smoke suppressant solution for your rigid and flexible PVC applications and compounds. It's our broad line of cost-effective, high performance Kemgard<sup>®</sup> smoke suppressants.**

From pipe and fitting compounds in high rise buildings to panels and decorative materials used in today's building and construction markets to modern aircraft interior panels, there's a Kemgard product to help you meet your most demanding smoke requirements.

Kemgard<sup>®</sup> smoke suppressants are manufactured by patented processes in which molybdates are precipitated on an inert core. This "coated core" approach makes more efficient use of the molybdate species by maximizing the

active surface area at a much lower cost than pure molybdate chemicals, such as ammonium octamolybdate (AOM).

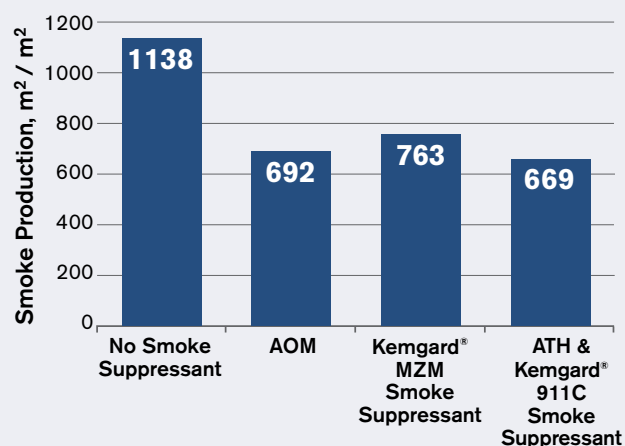
Kemgard smoke suppressants work well with blends of both alumina trihydrate (ATH) and magnesium hydroxide (MDH) to help achieve your target levels of smoke generation in rigid and flexible PVC. Huber offers an array of ATH and MDH products that complement the Kemgard technology in creating the optimal product formulation and solution for your application.

### Huber's Kemgard<sup>®</sup> Products

Physical Properties			Applications	
Kemgard Products (White Powder Appearance)	Median Particle Size, Microns	Description	Rigid PVC	Flexible PVC
Kemgard <sup>®</sup> 911C	3.3	Zinc Molybdate / Magnesium Silicate Complex	●	●
Kemgard <sup>®</sup> 1100	2	Zinc Molybdate / Magnesium Silicate Complex	●	●
Kemgard <sup>®</sup> MZM	2	Zinc Molybdate / Magnesium Hydroxide Complex	●	
Kemgard <sup>®</sup> 928	1	Zinc Molybdate / Magnesium Hydroxide Complex	●	
Kemgard <sup>®</sup> 911A	2.7	Calcium Molybdate Zinc Complex		●
Kemgard <sup>®</sup> 501	3.7	Calcium Molybdate Complex		●

# Here's What Makes Kemgard® Smoke Suppressants A Perfect Fit In Rigid And Flexible PVC

## ISO 5660 Total Smoke in Rigid PVC Compounds



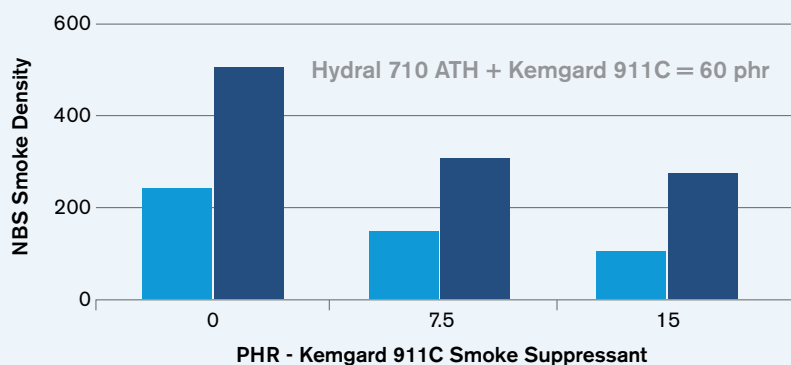
## Formulations Used to Generate ISO 5660 Smoke Production Data

Formulation Ingredient	Control	AOM	Kemgard® MZM	ATH & Kemgard® 911C
PVC Resin	100	100	100	100
Additives	3.2	3.2	3.2	3.2
Calcium Carbonate (CaCO <sub>3</sub> )	14	8	8	
Ammonium Octamolybdate (AOM)		6		
Kemgard® MZM Smoke Suppressant			6	
Kemgard® 911C Smoke Suppressant				6
ATH (Hydral® 710 Fine Precipitated ATH)				8

RIGID

## Kemgard® 911C Performance Advantages in Flexible PVC

■ 4-Minute Smoke Density ■ Maximum Smoke Density



## Flexible PVC Test Formulation Data

(Used to Generate Smoke Density Data)

Ingredient	PHR
PVC Resin (K70)	100
Plasticizer	40
Stabilizer	3
Sb <sub>2</sub> O <sub>3</sub>	3
Hydral® 710 Fine Precipitated ATH	Varies
Kemgard 911C Smoke Suppressant	Varies

FLEXIBLE



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## Huber's Unsurpassed Technical Service and Customer Care

Along with our high performing Kemgard® smoke suppressants comes unsurpassed technical expertise and customer service and our unique consultative selling process. Our technical and sales teams work in conjunction so your PVC application situations and requirements are met, ensuring the right Kemgard product is recommended.

### Kemgard® Rigid and Flexible PVC Technical Presentations

Huber offers technical presentations with expert guidance in using its Kemgard® smoke suppressants. The following are available upon request:

#### Flame Retardants and Smoke Suppressants in Plastics

*SPE Vinyltec, 2018*

#### Flame and Smoke Properties of PVC Flooring Compounds

*Applied Market Information (AMI) Polymers in Flooring, 2017*

#### Smoke Suppression of Rigid PVC

*AMI Profiles, 2016*

For more information about our Kemgard products and to order samples, contact us:

**Call:** 866-JMHUBER (866-564-8237)

**Click:** [kemgard.com](http://kemgard.com)

**Email:** [hubermaterials@huber.com](mailto:hubermaterials@huber.com)



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ISO 9001:2015 Certified  
Quality Management System



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