

# POLYMERIC FLAME RETARDANT MASTERBATCH FOR EXTRUDED POLYSTYRENE FOAM

APYROS 



HBCD Alternatives Information Session  
UNEP POPRC9  
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## ISOCHEMICALS Srl:

- ✓ COMPANY OF SACME GROUP
- ✓ GLOBAL PLAYER FOR EXPANDABLE POLYMERS
- ✓ 15% MARKET SHARE OF EUROPEAN XPS ADDITIVES MARKET



## XPS PROCESS



hbcd



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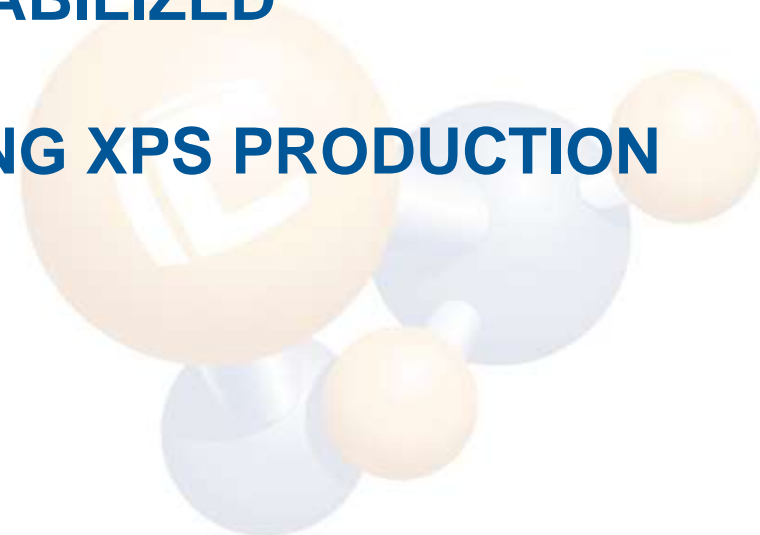
*A Chemtura Business*

**Emerald**  
Innovation™ 3000



## CHARACTERISTICS APYROS:

1. MASTERBATCH 50% ACTIVE;
2. POLYMERIC BROMINATED BASED (EMERALD INNOVATION 3000);
3. SYNERGIZED AND THERMAL STABILIZED
4. ABILITY TO PROCESS IN EXISTING XPS PRODUCTION PROCESS



# APYROS FOAM vs HBCD MASTERBATCH FOAM

## DOSAGE APYROS = DOSAGE HBCD MASTERBATCH

Thickness: 100 mm	APYROS FOAM	HBCD MASTERBATCH FOAM
λ VALUE (W/mK) (after 50 days)	0.035	0.035
OPEN CELL (%)	7%	6%
COMPRESSIVE STRENGTH ( EN 826 )	$\sigma_c \approx 300 \text{ kPa}$	
DENSITY (Kg/m <sup>3</sup> )	30.6	30.2
FLAMMABILITY : (after ageing time)	CLASS E (same height flame as HBCD foam)	CLASS E
WATER ABSORPTION ( UNI EN 12087:2008)	WL (T) < 0.7%	

## CONCLUSIONS

- 1. APYROS PROVIDES COMPARABLE FLAMMABILITY PERFORMANCE TO MASTERBATCH HBCD BASED**
- 2. “APYROS” FOAM HAS THE SAME CHARACTERISTICS OF “HBCD FOAM”**
- 3. APYROS IS COMPATIBLE WITH EXISTING XPS PROCESSES AND MATERIALS**





# APYROS

**HBCD FREE FLAME RETARDANT MASTERBATCH  
FOR XPS**

Thanks for your attention