



Combustion Products

Degradation may be one of two types: pyrolysis, a chemical change brought about by the action of heat in the absence of oxygen; and thermal-oxidative degradation, which is influenced by both heat and oxygen. When the temperature increases to a point where the majority of the bonds fail, decomposition occurs. At a high enough temperature and in the presence of sufficient oxygen, the oxidation of the polymer fragments proceeds rapidly enough to produce heat and flame, or combustion.

Marcryl develops almost no smoke, the smoke gases emitted are toxicologically inoffensive and the combustion gases generated do not attack the surfaces of other materials.

Marcryl burns with a bright flame. Under normal circumstances, combustion gives rise to carbon dioxide and water. Due to the material's chemical composition (carbon, hydrogen and oxygen), no acutely toxic substances like phosgene, acid vapours and sulphur dioxide can form. Since the material does not contain any halogens, no dioxins can form either.

Melted product is flammable and produces intense heat, contact with hot material will cause thermal burns.

Comparative testing against naturally occurring materials has shown that the toxicity of the combustion products is no greater than that from wood, wool or cork.

Summarising it can be said that toxicity of these combustion gases is determined by toxicity of carbon monoxide whereas contribution of other combustion gases is of secondary importance



Brett Martin Ltd. pursues a policy of continuous product development and reserves the right to amend specifications without notice.

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REF CODE
AFS_Prop_Combustion_Products
13.10.2016