

Eco-Friendly Foaming Agents

Properties of Eco-Friendly Foaming Agents

■ **D600F & D600FMT** have the effect on reducing formamide in EVA foam.
(formamide is classified as environmentally hazardous substances.)

■ **DX23F & DX23FMT** can reduce not only formamide, but also ammonia.

Each product has unique properties which make them of particular value in the production. Among these are;

- D600FMT/DX23FMT are masterbatch types of D600F/DX23F respectively.
- The each product has a formamide reduction rate of more than 80%
- Each EVA foam applied these products is detected 150-250ppm of formamide by GC-mass analyser.

Low Formamide Foaming Agents(modified ADCA)

Item	D600F	D600FMT
Appearance	Powder	Pellet
Color	Yellow	Yellow
Decomposition Temperature (°C)	193 ~ 198	195 ~ 200
Evolved Gas Volume (ml/g)	200 ~ 210	105 ~ 110
Contents of foaming agent (%)	≥ 99	50

Formamide content in EVA foam reduced by more than 80%

Formamide Test Result	in the case of using normal ADCA formamide in EVA foam : 1200 ~ 1500ppm in the case of using D600F, D600FMT formamide in EVA foam : 150 ~ 250ppm
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Low Formamide & Ammonia Foaming agents(modified ADCA)

Item	DX23F	DX23FMT
Appearance	Powder	Pellet
Color	Yellow	Yellow
Decomposition Temperature (°C)	145 ~ 155	148 ~ 158
Evolved Gas Volume (ml/g)	170 ~ 180	85 ~ 95
Contents of foaming agent (%)	≥ 99	50

Formamide & ammonia content in EVA foam reduced by more than 80%

Formamide Test Result	in the case of using normal ADCA formamide in EVA foam : 1200 ~ 1500ppm in the case of using DX23F, DX23FMT formamide in EVA foam : 150 ~ 250ppm
Ammonia Test Result	in the case of using normal ADCA ammonia in EVA foam : 500 ~ 600 ppm in the case of using DX23F, DX23FMT ammonia in EVA foam : 20 ~ 80 ppm ● Remarks: in the case of additional use of ZnO, It can increase ammonia evolution



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