EPA Sanitized

Chemistry Report for Case # P-21-0015 (Version name 1)

General

Submitter: Designer Molecules, Inc.

Contact: Kenneth Kirschenman **Contact Telephone No.:** (858) 348 1122, Ext 4704

TS No.: 20KK5E

Chemist: Butler, T **Contractor Support:**

PV Init (kg/yr): ███ **PV Max (kg/yr):** ████

Binding Option: ☐ **Exposure-Based Review:**██

Manufacture: ☑ **Import:** ☐

Chemical ID

CAS Number:2419899-87-7

Chemical Name: Amines, C36-alkylenedi-, polymers with 5,5'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[1,3-isobenzofurandione] and 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[2-aminophenol]

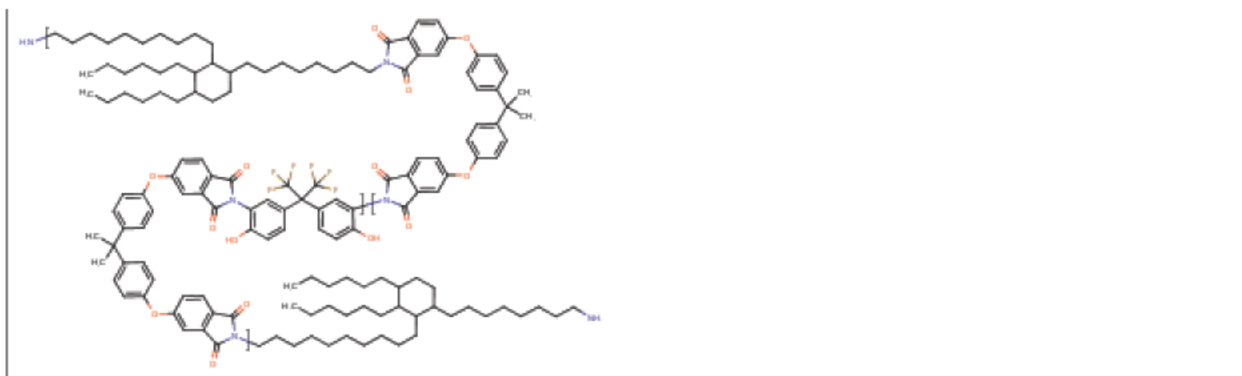
Trade Name:FM51-21, Imide Linked Polymer

IES Order:459670

Generic Name:not CBI

Chemistry Assessor: Tristan Butler

Chemical Structure



Physical Chemical Properties

Molecular Formula: C, H, F, N, O	**Molecular Weight:** 37230.0
% < 500: 0.0	**% < 1000:** 0.0
MP:	**MP Estimate:** Dec. >300
BP:	**BP Pressure:**
BP Estimate:	
VP (Torr):	**VP Estimate (Torr):** <0.000001
Water Solubility (g/L):	**Water Soluble Estimate (g/L):** <0.000001
Log P:	**Log P Estimate:**
Physical State — Neat: Solid	
Physical State — Manuf: Solution: █ % PMN substance in █████	
Physical State — Processing: Dispersion: █ % PMN substance in adhesive formulation	
Physical State — End Use: Solid: PMN substance entrained in dried adhesive on silicon wafer	

Additional Chemical Info:
NAVG MW = 37230 with 0% < 500 and 0% < 1000 by multi-angle light scattering (MALS) analysis.
There is also a GPC report, but there is no molecular weight analysis provided in it.
Submitted Properties: Yellow-amber solid; decomposes above 300°C, with increased weight loss above 400°C (TGA); flash point > 250°C (Sub.Est.). An FTIR spectrum is provided. The MSDS is for a solution of the PMN substance in methoxybenzene (anisole).
Estimated Properties: VP < 0.000001 torr (High MW polymer); WS < 0.000001 g/L (high mw polymer with hydrophobic feedstocks).
Amine FGEW = , assuming terminal amine groups.

Uses

Consumer Use?
Intended Uses (ICB):
Intended use: Resin for temporary bonding adhesive applied to the backs of semiconductor wafers, to facilitate mechanical grinding of the wafers to reduce their thickness
Amine FGEW =
Analogues (same use)
Patents (same use): none.
Other Uses:
Analogues (other use)
Analogues (same use and other use)
Patents (other use) none

Reaction Description

Pollution Prevention Analysis(P2 Analysis:)

None.

Analogs

Comments/Telephone Log

Attachments	Update/Upload Time	Update/Upload By
P-21-0015.mol	11/09/2020 11:02	Robert Meyers

Historic Documents

Attachments	Version Number	Updated/Uploaded Time	Updated/Uploaded By

Current Version Comments

Comment	Update/Upload Time	Update/Upload By