

Adamantane by Idemitsu Production Tech.

Idemitsu Adamantane

For Functionality Base Material, Adamantane

Technology

- Now Idemitsu developed **original production technology of Adamantane**. Comparing with conventional production, our process has advantages from the following points ;
 - Environmentally clean process** with proprietary solid catalyst.
 - Unique feedstock position.



Isomerization



- We will produce Adamantane commercially with original solid catalyst in the near future.

Properties

Chemical Formula	C₁₀H₁₆	Vapor Pressure	Sublimating
Physical State	Solid	Specific Gravity	1.07(20°C)
Appearance	White flake	Refractive Index	1.568±0.003
Melting Point	269°C		

The typical data represented herein were measured under certain specific conditions.

Idemitsu Kosan Co.,Ltd.



Adamantane derivatives

[Adamantate is the trademark of Idemitsu for Adamantane derivatives.]

Adamantate®

For Semiconductor Application and Functionality Materials.

Semicon. Application

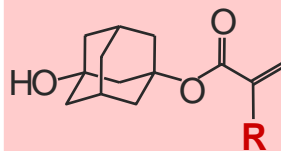
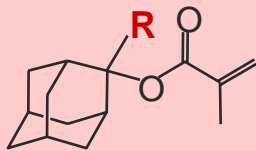
- Adamantate is now used to produce semiconductor as a **photoresist monomer**.

Adamantate MM :
R=Me

Adamantate HA :
R=H

Adamantate EM :
R=Et

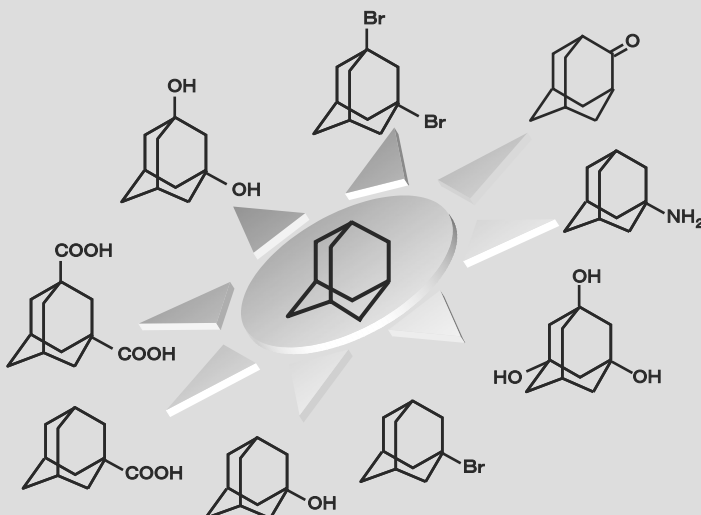
Adamantate HM :
R=Me



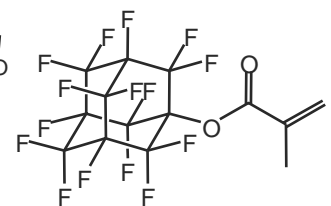
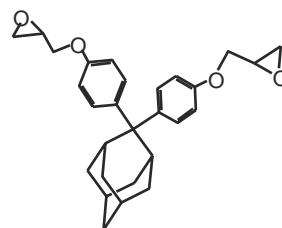
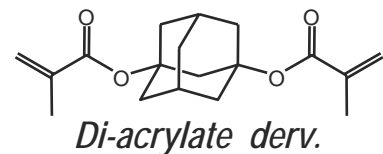
Typical Properties

	Adamantane Polymer	PMMA
Tg(°C)	170~200	108
Light Transparency (% , 3mm)	91	91~92
Refractive Index	1.54	1.49
Absorption Rate (%)	0.11	0.30

Intermediates



Other Derivatives



Epoxide deriv.

The typical data represented herein were measured under certain specific conditions.

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