

Market Research on Thermal Interface Material (TIM) & Thermally Conductive Filler-2020-

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1. Market size (2018 & 2019) and market forecast (-2030) of the Thermal Interface Material (TIM) by form, application and thermal conductivity
2. Manufacturers' share of TIM
3. Market size (2018 & 2019) and market forecast (-2030) of the thermally conductive fillers as Alumina, Aluminum nitride and Boron nitride by form and particle size
4. Application trends
 - Automotive, Power module and 5G Base Station
5. Case study of major TIM manufacturers and major thermally conductive filler manufacturers (14 companies)
 - TIM manufacturers: Denka, Fuji Polymer Industries, The Dow Chemical Company, Laird Performance Materials
 - Thermally conductive filler manufacturers: Showa Denko, Denka, Nippon Light Metal Company, Nippon Steel Chemical & Material, Toyo Aluminium, Tokuyama, Furukawa Denshi, 3M Company, Momentive Performance Materials, Saint-Gobain

Subject and classification of survey

Subject of survey and Companies surveyed

In this report, JMS defined surveyed object as electrically insulating type of TIM, which thermal conductivity is above 0.5W/mK. (JMS exclude electrically conductive type TIM)

Subject of survey		Companies surveyed
Thermal Interface Material (TIM)		[Japanese companies]ADEKA, Aronkasei, Kitagawa Industries, Cosmo Oil Lubricants, Satsumasoken, Sunstar Engineering, SunDelta, Shin-Etsu Chemical, ThreeBond, Sekisui Polymatech, Cemedine, Soken Chemical & Engineering, Somar, Taica, Takeuchi Industry, DIC, Dexerials, Denka, Teraoka Seisakusho, Toyo Ink Group, Toray, Tomoegawa, Namics, Nitto Denko Group, Hitachi Chemical, NihonHanda, Panasonic, Bando Chemical, Fuji Polymer Industries, Furukawa Denshi, Maxell, Mochida Corporation, The Yokohama Rubber, Ryoden Kasei, etc. [Overseas companies]3M Company, ASO Thermal Compounds, HALA Contec, Henkel, Honeywell, HRS, Keramische Folien, Laird Performance Materials, Lord Corporation, Momentive Performance Materials, Parker Hannifin, Shenzhen Aochun Technology, Tenssure International, T-Global Technology, The Dow Chemical, etc.
Thermally Conductive Filler	Alumina	Admatechs, Showa Denko, Sumitomo Chemical, Nippon Steel Chemical & Material, Denka, Nippon Light Metal, Almatiss, Antam, Bestry Performance Materials, CMP Tianjin, Henan Tianma New Material, Nabaletec, Novoray, Sibelco Korea, Tansail, Xuan Cheng Jing Rui New Material, etc.
	Aluminum Nitride	Toya Aluminium, Tokuyama, Combustion Synthesis, Furukawa Denshi, MARUWA, Thrutek, etc.
	Boron Nitride	Showa Denko, Denka, Tokuyama, Mizushima Ferroalloy, Mitsui Chemicals, 3M, Dandong Chemical Engineering Institute, Höganäs, Momentive Performance Materials, Saint-Gobain, etc.

Classification of TIM and Thermally Conductive Filler

[TIM Classification methods and types]

- 1)Form : Sheet, Phase change material (PCM), Grease
- 2)Application : LED, Mobile/PC, Automotive, Power devices, Others
- 3)Thermal conductivity: Below 1.5W/mK, 1.5-3W/mK, 3-5W/mK, 5W/mK or higher

[Classification methods and types for thermally conductive filler]

- 1)Form: <Alumina> Fine-particle/Crushed type, Spherical/Roundish type
<Aluminum Nitride> Fine-particle type, Agglomerated type
<Boron Nitride> Platelet/Hexagonal type, Agglomerated type
- 2)Adoption area : TIM, Others
- 3)Particle size

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Denka Company Limited, Fuji Polymer Industries Co., Ltd.,
The Dow Chemical Company, Laird Performance Materials

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Showa Denko K.K., Denka Company Limited, Nippon Light Metal
Company, Ltd., Nippon Steel Chemical & Material Co., Ltd.,
Toyo Aluminium K.K., Tokuyama Corporation, Furukawa Denshi
Co., Ltd., 3M Company, Momentive Performance Materials Inc.,
Saint-Gobain SA

About the report and how to order

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