

Supplier Name: Texas Instruments Inc. (DUNS# 00-732-1904)
 Contact Info: ti.com/support
 Form/Declaration Type: Distribute - RoHS and IEC 62474 DB
 Created on: 06/04/2022

Details for "OPA2170AIDSGT"

Current Product Information

TI part number	Lead finish/Ball material	MSL rating/peak reflow	Assembly site	Package Pins	Package body size (mm)	Total device mass (mg)*
OPA2170AIDSGT	NIPDAU	Level-1-260C-UNLIM	TI Semiconductor	DSG 8	2x2x0.75	11.8

*Total Device Mass
 The summary mass is a rounded value and will be within approximately +/- 10% of the detailed mass value.

Environmental Ratings Information

RoHS	REACH	Green	IEC 62474 DB
Yes	Yes	Yes	Yes

Component Information

Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
Bond Wire							
Other Nonferrous Metals and Alloys	Yttrium	7440-65-5	0.000001	0.001375	14	0.000008	0
Precious Metals	Gold	7440-57-5	0.072712	99.997249	999972	0.615811	6158
Precious Metals	Silver	7440-22-4	0.000001	0.001375	14	0.000008	0
Sub-Total			0.072714	100	1000000	0.615828	6158
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.156349	80.000102	800001	1.324148	13241
Thermoplastics	Epoxy	85954-11-6	0.039087	19.999898	199999	0.331035	3310
Sub-Total			0.195436	100	1000000	1.655183	16552
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	6.8264	97.52	975200	57.814028	578140
Copper and Its Alloys	Iron	7439-89-6	0.161	2.3	23000	1.363538	13635
Copper and Its Alloys	Phosphorus	7723-14-0	0.0021	0.03	300	0.017785	178
Zinc and Its Alloys	Zinc	7440-66-6	0.0105	0.15	1500	0.088926	889
Sub-Total			7	100	1000000	59.284278	592843
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.19024	95.12	951200	1.611177	16112
Precious Metals	Gold	7440-57-5	0.00156	0.78	7800	0.013212	132
Precious Metals	Palladium	7440-05-3	0.0082	4.1	41000	0.069447	694
Sub-Total			0.2	100	1000000	1.693837	16938
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	3.438117	88.000003	880000	29.118041	291180
Other Organic Materials	Chlorine	7782-50-5	0.000039	0.000998	10	0.00033	3
Other Plastics and Rubber	Carbon Black	1333-86-4	0.011721	0.300004	3000	0.099267	993
Thermoplastics	Epoxy	85954-11-6	0.457074	11.698995	116990	3.871043	38710
Sub-Total			3.906951	100	1000000	33.088681	330887
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.432414	100	1000000	3.662193	36622
Sub-Total			0.432414	100	1000000	3.662193	36622
Total			11.807515			100	1000000

Important Note

The ppm calculations are at the homogeneous material level and are maximum concentration values. The ppm displayed represents the homogeneous material with the highest ppm for that substance. The amount (mg) calculations represent the maximum total amount of each substance within the component. The ppm calculations are at the component level and are average concentration values. The amount (mg) calculations represent the average total amount of each substance within the component. See Glossary of Terms for more details.

Important Part Information

There is a remote possibility the Customer Part Number (CPN) your company uses could reference more than one TI part number. This is due to two or more users (EMSI or subcontractors) using the same CPN for different TI part numbers. If this occurs, please check your Customer Part Number and cross reference it with the TI part number seen on this page.

Product Content Methodology

For an explanation of the methods used to determine material weights, See Product Content Methodology.

Material Declaration Certificate for Semiconductor IC Packaged Products

TI certifies that the material content information provided by TI is representative and accurate to the best of their knowledge based on material information provided by its suppliers and their combination into finished IC packaged products. TI semiconductor products designated to be "Pb-free", "Green" or "RoHS Exempt" fully meets the latest EU RoHS Directive requirements along with other legislation as seen in the former IIG-101 list that has been transferred to the IEC 62474 database.

Important Information/Disclaimer

TI bases its material content information on information provided by third-party suppliers and has taken, and continues to take, reasonably diligent steps to provide any required or available information. TI may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers may consider certain information to be proprietary, and thus certain information may not be available for release by TI. The material content information is provided by TI "as is."

For additional information, please contact TI customer support.

Signature: [\(click here for a fuller statement with a signed certificate\)](#)

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality
 For further environmental statements, please go to www.ti.com/ecoinfo
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RoHS: Means TI semiconductor products that are compliant with the current RoHS requirement that the maximum concentration values of the ten substances listed in RoHS Annex II do not exceed 0.1 % by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI semiconductor products labeled as "RoHS Compliant" are suitable for use in specified lead-free processes. TI may also reference these types of semiconductor products as "Pb-Free." These TI semiconductor products are also fully compliant with GADSL and the IEC 62474 database for electronic requirements.

RoHS Exempt: Means TI semiconductor products that contain lead (Pb) above the RoHS Annex II threshold, but that fall within one of the specific RoHS exemptions noted above or documented in <http://www.ti.com/lit/pdf/szzq088>

Green: Means the content of Chlorine (Cl) and Bromine (Br)-based flame retardants meet J5709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb2O3) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.