

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: 06/12/2022

Details for "TPS77333DGK"

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)*
TPS77333DGK	NIPDAU	Level-1-260C-UNLIM	Ext-Mfg	DGK 8	3x3x1	25.1

***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							
Not Categorized	Proprietary Materials		0.000003	0.00429	43	0.000012	0
Precious Metals	Gold	7440-57-5	0.06993	99.99571	999957	0.278062	2781
Sub-Total			0.069933	100	1000000	0.278074	2781
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.360523	73.000018	730000	1.433545	14335
Thermoplastics	Epoxy	85954-11-6	0.133344	26.999982	270000	0.530215	5302
Sub-Total			0.493867	100	1000000	1.96376	19638
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	9.65634	94.67	946700	38.396439	383964
Copper and Its Alloys	Iron	7439-89-6	0.0204	0.2	2000	0.081116	811
Nickel and Its Alloys	Nickel	7440-02-0	0.3264	3.2	32000	1.297862	12979
Other Inorganic Materials	Silicon	7440-21-3	0.08976	0.88	8800	0.356912	3569
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.0051	0.05	500	0.020279	203
Zinc and Its Alloys	Zinc	7440-66-6	0.102	1	10000	0.405582	4056
Sub-Total			10.2	100	1000000	40.55819	40582
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.194045	95.120098	951201	0.77158	7716
Precious Metals	Gold	7440-57-5	0.001591	0.779902	7799	0.006326	63
Precious Metals	Palladium	7440-05-3	0.008364	4.1	41000	0.033258	333
Sub-Total			0.204	100	1000000	0.811164	8112
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	10.47377	85.000002	850000	41.64678	416468
Other Plastics and Rubber	Carbon Black	1333-86-4	0.036966	0.299998	3000	0.146988	1470
Thermoplastics	Epoxy	85954-11-6	1.811346	14.7	147000	7.202443	72024
Sub-Total			12.322082	100	1000000	48.996211	489962
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.859169	100	1000000	7.392601	73926
Sub-Total			1.859169	100	1000000	7.392601	73926
Total			25.149051			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 (EMSIs 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 JIG-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: \(click here for a fuller statement with a signed certificate\)](#)

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 For further environmental statements, please go to www.ti.com/eoinfo
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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 JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.