

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: 06/09/2022

Details for "TLV71333PDQNR"

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)*
TLV71333PDQNR	NIPDAU	Level-1-260C-UNLIM	Ext-Mfg	DQN 4	1x1x0.37	1.1

*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							
Precious Metals	Gold	7440-57-5	0.011242	100	1000000	1.034487	10345
Sub-Total			0.011242	100	1000000	1.034487	10345
Die Attach Adhesive							
Other Nonferrous Metals and Alloys	Titanium Dioxide	13463-67-7	0.000311	2.999614	29996	0.028618	286
Thermoplastics	Epoxy	85954-11-6	0.010057	97.000386	970004	0.925444	9254
Sub-Total			0.010368	100	1000000	0.954062	9541
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	0.316276	74	740000	29.103671	291037
Nickel and Its Alloys	Nickel	7440-02-0	0.035175	8.229995	82300	3.236798	32368
Thermoplastics	Epoxy	85954-11-6	0.075949	17.770005	177700	6.988816	69888
Sub-Total			0.4274	100	1000000	39.329286	393293
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.121754	95.120313	951203	11.203785	112038
Precious Metals	Gold	7440-57-5	0.000998	0.779688	7797	0.091836	918
Precious Metals	Palladium	7440-05-3	0.005248	4.1	41000	0.48292	4829
Sub-Total			0.128	100	1000000	11.778541	117785
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	0.394671	84.810007	848100	36.317568	363176
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	0.024199	5.200071	52001	2.226788	22268
Other Plastics and Rubber	Carbon Black	1333-86-4	0.000977	0.209945	2099	0.089903	899
Thermoplastics	Epoxy	85954-11-6	0.045512	9.779976	97800	4.188008	41880
Sub-Total			0.465359	100	1000000	42.822267	428223
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.044353	100	1000000	4.081357	40814
Sub-Total			0.044353	100	1000000	4.081357	40814
Total			1.086722			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 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 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.