

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

Details for "SN74AXC1T45QDRYRQ1"

**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)*
SN74AXC1T45QDRYRQ1	NIPDAU	Level-1-260C-UNLIM	Ext-Mfg	DRY   6	1.5x1x0.55	6.1

**\*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
<b>Bond Wire</b>							
Not Categorized	Proprietary Materials		0.000001	0.006208	62	0.000017	0
Precious Metals	Gold	7440-57-5	0.016106	99.993792	999938	0.266108	2661
Sub-Total			0.016107	100	1000000	0.266124	2661
<b>Die Attach Adhesive</b>							
Other Inorganic Materials	Inorganic Filler		0.000134	1.002169	10022	0.002214	22
Other Inorganic Materials	Silica	7631-86-9	0.001872	14.000449	140004	0.03093	309
Thermoplastics	Epoxy	85954-11-6	0.011365	84.997382	849974	0.187776	1878
Sub-Total			0.013371	100	1000000	0.220919	2209
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	4.68096	97.52	975200	77.340061	773401
Copper and Its Alloys	Iron	7439-89-6	0.1104	2.3	23000	1.834058	18241
Copper and Its Alloys	Phosphorus	7723-14-0	0.00144	0.03	300	0.023792	238
Zinc and Its Alloys	Zinc	7440-66-6	0.0072	0.15	1500	0.11896	1190
Sub-Total			4.8	100	1000000	79.306871	793069
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	0.038124	95.11976	951198	0.629895	6299
Precious Metals	Gold	7440-57-5	0.000313	0.780938	7809	0.005171	52
Precious Metals	Palladium	7440-05-3	0.001643	4.099301	40993	0.027146	271
Sub-Total			0.04008	100	1000000	0.662212	6622
<b>Mold Compound</b>							
Other Inorganic Materials	Silica	7631-86-9	1.036275	91.999989	920000	17.12161	171216
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	0.002253	0.20002	2000	0.037225	372
Other Plastics and Rubber	Carbon Black	1333-86-4	0.003379	0.299986	3000	0.055829	558
Thermoplastics	Epoxy	85954-11-6	0.084479	7.500004	750004	1.395784	13958
Sub-Total			1.126386	100	1000000	18.610448	186104
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	0.056495	100	1000000	0.933425	9334
Sub-Total			0.056495	100	1000000	0.933425	9334
<b>Total</b>			6.052439			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: [\(click here for a fuller statement with a signed certificate\)](#)

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality  
 For further environmental statements, please go to [www.ti.com/ecoinfo](http://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.