

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: 05/09/2022

Details for "SN74AHCT14NSR"

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)*
SN74AHCT14NSR	NIPDAU	Level-1-260C-UNLIM	TI MALAYSIA A/T	NS   14	5.3x10.3x1.95	224.1

\*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>							
Copper and Its Alloys	Copper	7440-50-8	0.096252	99.998961	999990	0.042951	430
Precious Metals	Silver	7440-22-4	0.000001	0.001039	10	0	0
Sub-Total			<b>0.096253</b>	<b>100</b>	<b>1000000</b>	<b>0.042951</b>	<b>430</b>
<b>Die Attach Adhesive</b>							
Precious Metals	Silver	7440-22-4	0.122973	80.00013	800001	0.054875	549
Thermoplastics	Epoxy	85954-11-6	0.030743	19.99987	199999	0.013719	137
Sub-Total			<b>0.153716</b>	<b>100</b>	<b>1000000</b>	<b>0.068593</b>	<b>686</b>
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	37.664505	97.425	974250	16.807147	168071
Copper and Its Alloys	Iron	7439-89-6	0.92784	2.4	24000	0.414033	4140
Copper and Its Alloys	Phosphorus	7723-14-0	0.005799	0.015	150	0.002588	26
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.011598	0.03	300	0.005175	52
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.011598	0.03	300	0.005175	52
Zinc and Its Alloys	Zinc	7440-66-6	0.03866	0.1	1000	0.017251	173
Sub-Total			<b>38.66</b>	<b>100</b>	<b>1000000</b>	<b>17.25137</b>	<b>172514</b>
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	1.655088	95.12	951200	0.738555	7386
Precious Metals	Gold	7440-57-5	0.013572	0.78	7800	0.006056	61
Precious Metals	Palladium	7440-05-3	0.07134	4.1	41000	0.031834	318
Sub-Total			<b>1.74</b>	<b>100</b>	<b>1000000</b>	<b>0.776445</b>	<b>7764</b>
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	160.99168	88	880000	71.839808	718398
Other Plastics and Rubber	Carbon Black	1333-86-4	0.548835	0.3	3000	0.244908	2449
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	1.006198	0.55	5500	0.448999	4490
Thermoplastics	Epoxy	85954-11-6	20.398378	11.15	111500	9.10243	91024
Sub-Total			<b>182.945091</b>	<b>100</b>	<b>1000000</b>	<b>81.636145</b>	<b>816361</b>
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	0.50309	100	1000000	0.224495	2245
Sub-Total			<b>0.50309</b>	<b>100</b>	<b>1000000</b>	<b>0.224495</b>	<b>2245</b>
<b>Total</b>			<b>224.09815</b>			<b>100</b>	<b>1000000</b>

**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.

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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/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 JS709B 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.