

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: 05/12/2022

Details for "SN74LVC14AQRQ1"

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)*
SN74LVC14AQRQ1	NIPDAU	Level-1-260C-UNLIM	TI AGUASCALIENTES	D 14	3.91X8.65X1.58	117.2

*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	0.15324	100	1000000	0.130726	1307
Sub-Total			0.15324	100	1000000	0.130726	1307
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.10347	78.999809	789998	0.088268	883
Thermoplastics	Epoxy	85954-11-6	0.027505	21.000191	210002	0.023464	235
Sub-Total			0.130975	100	1000000	0.111732	1117
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	7.978481	97.049994	970500	6.806289	68063
Copper and Its Alloys	Iron	7439-89-6	0.213746	2.6	26000	0.182343	1823
Copper and Its Alloys	Phosphorus	7723-14-0	0.012332	0.150006	1500	0.01052	105
Zinc and Its Alloys	Zinc	7440-66-6	0.016442	0.2	2000	0.014026	140
Sub-Total			8.221001	100	1000000	7.013178	70132
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.272043	95.11993	951199	0.232075	2321
Precious Metals	Gold	7440-57-5	0.002231	0.78007	7801	0.001903	19
Precious Metals	Palladium	7440-05-3	0.011726	4.1	41000	0.010003	100
Sub-Total			0.286	100	1000000	0.243981	2440
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	95.000115	88	880000	81.042779	810428
Other Plastics and Rubber	Carbon Black	1333-86-4	0.323864	0.3	3000	0.276282	2763
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.593751	0.55	5500	0.506518	5065
Thermoplastics	Epoxy	85954-11-6	12.036946	11.15	111500	10.268488	102685
Sub-Total			107.954676	100	1000000	92.094066	920941
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.476292	100	1000000	0.406316	4063
Sub-Total			0.476292	100	1000000	0.406316	4063
Total			117.222184			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 (EMSLs 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
 Created on: 05/12/2022

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.