

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 "SN74LVC823ADGVR"

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)*
SN74LVC823ADGVR	NIPDAU	Level-1-260C-UNLIM	TI MALAYSIA A/T	DGV 24	4.4x5x1.05	58.8

*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							
Other Nonferrous Metals and Alloys	Yttrium	7440-65-5	0.000001	0.000671	7	0.000002	0
Precious Metals	Gold	7440-57-5	0.148963	99.997986	999980	0.253413	2534
Precious Metals	Silver	7440-22-4	0.000002	0.001343	13	0.000003	0
Sub-Total			0.148966	100	1000000	0.253418	2534
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.513754	70.000027	700000	0.87399	8740
Thermoplastics	Epoxy	85954-11-6	0.22018	29.999973	300000	0.374567	3746
Sub-Total			0.733934	100	1000000	1.248556	12486
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	21.350982	97.425	974250	36.321931	363219
Copper and Its Alloys	Iron	7439-89-6	0.525967	2.399999	24000	0.894766	8948
Copper and Its Alloys	Phosphorus	7723-14-0	0.003287	0.014999	150	0.005592	56
Copper and Its Alloys	Tin	7440-31-5	0.006575	0.030002	300	0.011185	112
Copper and Its Alloys	Zinc	7440-66-6	0.021915	0.099999	1000	0.037281	373
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.006575	0.030002	300	0.011185	112
Sub-Total			21.915301	100	1000000	37.281941	372819
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.88623	89.999909	899999	1.50764	15076
Precious Metals	Gold	7440-57-5	0.024618	2.500048	25000	0.04188	419
Precious Metals	Palladium	7440-05-3	0.073853	7.500043	75000	0.125637	1256
Sub-Total			0.984701	100	1000000	1.675157	16752
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	27.323325	85.500003	855000	46.48198	464820
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	0.958713	3	30000	1.630946	16309
Other Organic Materials	Chlorine	7782-50-5	0.006391	0.019999	200	0.010872	109
Other Plastics and Rubber	Carbon Black	1333-86-4	0.095871	0.299999	3000	0.163094	1631
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.031957	0.1	1000	0.054365	544
Thermoplastics	Epoxy	85954-11-6	3.540847	11.08	110800	6.023629	60236
Sub-Total			31.957104	100	1000000	54.364887	543649
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	3.042612	100	1000000	5.17604	51760
Sub-Total			3.042612	100	1000000	5.17604	51760
Total			58.782618			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
 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 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.