

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: 05/20/2022

Details for "BQ24031RHRLR"

**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)*
BQ24031RHRLR	NIPDAU	Level-2-260C-1 YEAR	TI MALAYSIA A/T	RHL   20	3.5x4.5x0.9	41.8

\*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
<b>Bond Wire</b>							
Copper and Its Alloys	Copper	7440-50-8	0.175245	99.998288	999983	0.41941	4194
Copper and Its Alloys	Iron	7439-89-6	0.000001	0.000571	6	0.000002	0
Precious Metals	Silver	7440-22-4	0.000002	0.001141	11	0.000005	0
Sub-Total			0.175248	100	1000000	0.419417	4194
<b>Die Attach Adhesive</b>							
Other Inorganic Materials	Silica	7631-86-9	0.021822	2.000018	20000	0.052226	522
Precious Metals	Silver	7440-22-4	0.752852	68.999991	690000	1.801784	18018
Thermoplastics	Epoxy	85954-11-6	0.316416	28.999991	290000	0.757271	7573
Sub-Total			1.09109	100	1000000	2.611281	26113
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	17.71414	99.25	992500	42.394847	423948
Other Nonferrous Metals and Alloys	Chromium	7440-47-3	0.046405	0.260001	2600	0.11106	1111
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.04462	0.25	2500	0.106788	1068
Zinc and Its Alloys	Zinc	7440-66-6	0.042835	0.239999	2400	0.102516	1025
Sub-Total			17.848	100	1000000	42.715211	427152
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	0.305335	95.119938	951199	0.730751	7308
Precious Metals	Gold	7440-57-5	0.002504	0.780062	7801	0.005993	60
Precious Metals	Palladium	7440-05-3	0.013161	4.1	41000	0.031498	315
Sub-Total			0.321	100	1000000	0.768242	7682
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	16.993539	90.500001	905000	40.670249	406702
Other Plastics and Rubber	Carbon Black	1333-86-4	0.093887	0.5	5000	0.224698	2247
Thermoplastics	Epoxy	85954-11-6	1.689965	8.999999	90000	4.044555	40446
Sub-Total			18.777391	100	1000000	44.939502	449395
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	3.570981	100	1000000	8.546347	85463
Sub-Total			3.570981	100	1000000	8.546347	85463
<b>Total</b>			41.78371			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 IIG-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 J57098 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.