

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: **06/10/2022**

**Details for "TPS53313RGET"**

**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)*
TPS53313RGET	NIPDAU	Level-2-260C-1 YEAR	TI PHILIPPINES CLARK A/T	RGE   24	4x4x0.9	42

**\*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>							
Aluminum and Its Alloys	Aluminum	7429-90-5	0.000001	0.000107	1	0.000002	0
Copper and Its Alloys	Copper	7440-50-8	0.931353	99.997316	999973	2.219873	22199
Copper and Its Alloys	Iron	7439-89-6	0.000004	0.000429	4	0.00001	0
Other Inorganic Materials	Sulfur	7704-34-9	0.000001	0.000107	1	0.000002	0
Other Nonferrous Metals and Alloys	Calcium	7440-70-2	0.000003	0.000322	3	0.000007	0
Precious Metals	Silver	7440-22-4	0.000016	0.001718	17	0.000038	0
Sub-Total			<b>0.931378</b>	<b>100</b>	<b>1000000</b>	<b>2.219933</b>	<b>22199</b>
<b>Die Attach Adhesive</b>							
Precious Metals	Silver	7440-22-4	0.786916	80	800000	1.875609	18756
Thermoplastics	Epoxy	85954-11-6	0.196729	20	200000	0.468902	4689
Sub-Total			<b>0.983645</b>	<b>100</b>	<b>1000000</b>	<b>2.344511</b>	<b>23445</b>
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	17.256598	99.249997	992500	41.130978	411310
Other Nonferrous Metals and Alloys	Chromium	7440-47-3	0.045206	0.259999	2600	0.107748	1077
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.043468	0.250003	2500	0.103606	1036
Zinc and Its Alloys	Zinc	7440-66-6	0.041729	0.240001	2400	0.099461	995
Sub-Total			<b>17.387001</b>	<b>100</b>	<b>1000000</b>	<b>41.441792</b>	<b>414418</b>
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	0.297726	95.120128	951201	0.709628	7096
Precious Metals	Gold	7440-57-5	0.002441	0.779872	7799	0.005818	58
Precious Metals	Palladium	7440-05-3	0.012833	4.1	41000	0.030587	306
Sub-Total			<b>0.313</b>	<b>100</b>	<b>1000000</b>	<b>0.746033</b>	<b>7460</b>
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	16.968022	87.999996	880000	40.443159	404432
Other Organic Materials	Chlorine	7782-50-5	0.000193	0.001001	10	0.00046	5
Other Plastics and Rubber	Carbon Black	1333-86-4	0.057846	0.300002	3000	0.137876	1379
Thermoplastics	Epoxy	85954-11-6	2.255783	11.699	116990	5.376643	53766
Sub-Total			<b>19.281844</b>	<b>100</b>	<b>1000000</b>	<b>45.958137</b>	<b>459581</b>
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	3.058366	100	1000000	7.289593	72896
Sub-Total			<b>3.058366</b>	<b>100</b>	<b>1000000</b>	<b>7.289593</b>	<b>72896</b>
<b>Total</b>			<b>41.955234</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 (EMSIs 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 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.