Supplier Name: Texas Instruments Inc. (DUNS# 00-732-1904)

Contact Info:

ti.com/support
Distribute - RoHS and IEC 62474 DB Form/Declaration Type:

08/25/2022 Created on:

#### Details for "TL074MDEP"

#### **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)*
TL074MDEP	NIPDAU	Level-1-260C-UNLIM	TI AGUASCALIENTES	D   14	8.7x3.9x1.75	147.3

### \*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

				Homogeneous Material Level		Component Level	
Component	Substance	CAS Number	Amount (mg)	Percentage %	ppm	Percentage %	ppm
Bond Wire							
Precious Metals	Gold	7440-57-5	0.121442	100	1000000	0.082448	824
Sub-Total			0.121442	100	1000000	0.082448	824
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.759095	78.999979	790000	0.515358	5154
Thermoplastics	Epoxy	85954-11-6	0.201785	21.000021	210000	0.136994	1370
Sub-Total			0.96088	100	1000000	0.652352	6524
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	44.02932	97.41	974100	29.89199	298920
Copper and Its Alloys	Iron	7439-89-6	1.0848	2.4	24000	0.736483	7365
Copper and Its Alloys	Phosphorus	7723-14-0	0.01356	0.03	300	0.009206	92
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.01356	0.03	300	0.009206	92
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.01356	0.03	300	0.009206	92
Zinc and Its Alloys	Zinc	7440-66-6	0.0452	0.1	1000	0.030687	307
Sub-Total			45.2	100	1000000	30.686778	306868
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.644914	95.120059	951201	0.437839	4378
Precious Metals	Gold	7440-57-5	0.005288	0.779941	7799	0.00359	36
Precious Metals	Palladium	7440-05-3	0.027798	4.1	41000	0.018872	189
Sub-Total			0.678	100	1000000	0.460302	4603
Mold Compound	•	•				•	
Other Inorganic Materials	Fused Silica	60676-86-0	73.598505	76	760000	49.966836	499668
Other Organic Materials	Proprietary Non Halide Flame Retardant	Trade Secret	3.389405	3.5	35000	2.301104	23011
Other Plastics and Rubber	Carbon Black	1333-86-4	0.29052	0.3	3000	0.197237	1972
Thermoplastics	Epoxy	85954-11-6	19.561708	20.2	202000	13.280659	132807
Sub-Total			96.840138	100	1000000	65.745836	657458
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	3.494249	100	1000000	2.372284	23723
Sub-Total			3.494249	100	1000000	2.372284	23723
Total			147.294709		_	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 (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 Created on: 08/25/2022

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/szqq088

Green: Means the content of Chiorine (CI) and Bromine (Br)-based flame retardants meet JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.