TSC Materials Composition Declaration

Part Number:LTD7S24CAH
Part Weight Amount(g):2.691
SCIP:2abcb593-e31f-4ca6-bf71-eb25d1847201

Material Name	Substance Name	CAS No.	Raw Material Proportion	Proportion	ID	Exemption RoHS	Exemption ELV
Clip	Copper(Cu)	7440-50-8	99.24%	14.451%	RL-35-1		
	Nickel(Ni)	7440-02-0	0.76%				
Dice	Silicon(Si)	7440-21-3	99.29%	0.765%	RD-11		
	Gold(Au)	7440-57-5	0.01%				
	Nickel(Ni)	7440-02-0	0.14%				
	Silicon Dioxide	7631-86-9	0.5%				
	Silicon Nitride	12033-89-5	0.06%				
Die Attach(Solder)	Silver(Ag)	7440-22-4	2.5%	0.554%	RS-08	7(a)-I.	8e.
	Lead(Pb)	7439-92-1	92.5%				
	Tin(Sn)	7440-31-5	5%				
Lead Frame	Copper(Cu)	7440-50-8	99.24%	61.425%	RL-35		
	Nickel(Ni)	7440-02-0	0.76%				
Molding Compound	Carbon Black	1333-86-4	1%	21.69%	RM-15		
	Silicon Dioxide	7631-86-9	3.5%				
	Epoxy Resin A	Trade secret 2	3.5%				
	Poly[(O-Cresyl Glycidyl Ether)-Co-Formaldehyde]	29690-82-2	3.5%				
	Phenol-Formaldehyde Resin	9003-35-4	3.5%				
	Fused Silica	60676-86-0	85%				
Plating	Tin(Sn)	7440-31-5	100%	0.872%	RP-01		
Polyimide	Polyimide Resin	62929-02-6	100%	0.243%	RPO-01		

Tolerance ±10%

Note:
1. It's apply to the RoHS exemption term
7(a)-I.Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)for internal interconnections for attaching die, or other components along with a die in semiconductor assembly with steady state or transient/impulse currents of 0.1 A or greater or blocking voltages beyond 10 V, or die edge sizes larger than 0.3 mm × 0.3 mm

2. It's apply to the ELV exemption term
8e. Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

Created On: 2025-12-03

Materials Disclosure Disclaimer: TSC, based on its material content information provided by third-party suppliers, has taken and will continue to take reasonably diligent steps to provide any required or available information. TSC may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TSC and TSC suppliers may consider certain information to be proprietary, and thus certain information may not be available for release by TSC. Thus this information is provided only as estimates, and do not include trace levels of dopants and metal materials contained within devices in the finished products.

TAIWAN SEMICONDUCTOR

Safety Data Sheet

1.PRODUCT AND COMPANY IDENTIFICATION

- Part Number:LTD7S24CAH
- Supplier Name: Taiwan Semiconductor Co., Ltd.
- Supplier Address: 11Fl., No. 205, Sec. 3, Beishin Rd., Xindian Dist., New Taipei City 231, Taiwan, R.O.C.
- Contact Tel/Fax: +886-2-8912-1588 / +886-2-8913-1788

2.HAZARDS IDENTIFICATION

- Health Hazards: May cause an allergic skin reaction.
- Flammability: None
- Reactivity: None

3.COMPOSITION/INFORMATION ON INGREDIENTS

Material Name	Substance Name	CAS No.	Raw Material Proportion	Proportion
Clip	Copper(Cu)	7440-50-8	99.24%	14.451%
	Nickel(Ni)	7440-02-0	0.76%	
Dice	Silicon(Si)	7440-21-3	99.29%	0.765%
	Gold(Au)	7440-57-5	0.01%	
	Nickel(Ni)	7440-02-0	0.14%	
	Silicon Dioxide	7631-86-9	0.5%	
	Silicon Nitride	12033-89-5	0.06%	
Die Attach(Solder)	Silver(Ag)	7440-22-4	2.5%	0.554%
	Lead(Pb)	7439-92-1	92.5%	
	Tin(Sn)	7440-31-5	5%	
Lead Frame	Copper(Cu)	7440-50-8	99.24%	61.425%
	Nickel(Ni)	7440-02-0	0.76%	
Molding Compound	Carbon Black	1333-86-4	1%	21.69%
	Silicon Dioxide	7631-86-9	3.5%	
	Epoxy Resin A	Trade secret 2	3.5%	
	Poly[(O-Cresyl Glycidyl Ether)-Co-Formaldehyde]	29690-82-2	3.5%	
	Phenol-Formaldehyde Resin	9003-35-4	3.5%	
	Fused Silica	60676-86-0	85%	
Plating	Tin(Sn)	7440-31-5	100%	0.872%
Polyimide	Polyimide Resin	62929-02-6	100%	0.243%

4.FIRST-AID MEASURES

- Oral Exposure: N/A
- Inhalation Exposure: N/A
- Dermal Exposure: Wash off in flowing water or shower with soap. If irritation occurs, get medical attention.
- Eye Exposure: N/A

5.FIREFIGHTING MEASURES

- Self-Ignition Temp.: N/A (Non self-ignition product)
- Flammability: N/A (Product is uninflammable.)
- Extinguishing Media:
- Suitable: Use water, carbon dioxide, dry chemical powder or appropriate foam if packing materials catch fire.
- Firefighting: Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eye and respiratory system.
- Specific Hazard(s): Emits toxic fumes under fire conditions.

6.ACCIDENTAL RELEASE MEASURES

- Procedure(s) of personal precaution(s): Exercise appropriate precautions to minimize direct contact with skin.
- Methods for Cleaning Up: Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

7.HANDLING AND STROAGE

The product shall be stored in manufacturer's original package, with the stockroom temperature with +10°C to +30°C and the air humidity – sustained within under 70%. The recommended uttermost storage period is 2 year. When transporting products from the storeroom and during the manufacturing process, the FCFC (first-in-first-out) condition should be observed.

8.EXPOSURE CONTROLS / PERSONAL PROTECTION

- Design of technical: N/A (IC are solid.)
- Occupational exposure: N/A
- Personal Protection
- Respiratory protection: N/A
- Hand protection: N/A
- Eye protection: N/A
- Body protection: N/A

9.PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Odor	No odor
Specific Weight	N/A
Vapor pressure	N/A
Vapor density	N/A
Boiling po	N/A
Freezing point	N/A
Melting point	N/A
PH	N/A

10.STABILITY AND REACTIVITY

- Stability
- Stable: Stable
- Material to Avoid: Strong oxidizing agents.
- Hazardous Decomposition Products: None
- Hazardous Polymerization: Will not occur.

11.ECOLOGICAL INFORMATION

No data available.

12.TOXICOLOGICAL INFORMATION

Possibility of irritation	No
Possibility of allergic reaction	Possibility of allergic reaction Skin contact and irritation
Toxicity affecting the reproductive functions	No
Substance, which are toxic as a result of	N/A

13.DISPOSAL CONSIDERATIONS

Waste disposal takes place with observance of all local and state laws. There are no special disposal procedures.

14.TRANSPORT INFORMATION

Do not fling package with product.

15. REGULATORY INFORMATION

No particular. Please refer to the local regulatory information.

16.INFORMATION

Supplier	Taiwan Semiconductor Co., Ltd.
Address	11Fl., No. 205, Sec. 3, Beishin Rd., Xindian Dist., New Taipei City 231,
Contact Tel/Fax	(T) +886-2-8912-1588(F) +886-2-8913-1788
Date	2025-12-03