

Material Safety Data Sheet



Design Viitor into your FUTURE

1. Product & Manufacturer

Product Name:	MOSFET
Product Number:	VTR04N160LSA (TO-252)
Supplier or Manufacturer:	Viitor Semiconductor Co., Ltd.
Address:	Rm. A, 3F., No. 86, Minquan Rd., Xindian Dist., New Taipei City 231023, Taiwan
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Date:	2022/12/28

2. Composition/Information on Ingredients

Material	Content (per product)wt%	Chemical Composition	CAS No	Content%(per homogeneous material)
Plating	2.6	Sn	7440-31-5	100.00
Epoxy molding	34.7	Silica (Amorphous)	60676-86-0	96.50
		Epoxy resin A	trade secret	1.00
		Epoxy resin B	trade secret	1.00
		Phenol Resin	trade secret	1.00
		Carbon black	1333-86-4	0.50
Bonding wire	2.04	AL	7429-90-5	100.00
		Cu	7440-50-8	100.00
solder wire	0.78	Pb	7439-92-1	92.50
		Sn	7440-31-5	5.00
		Ag	7440-22-4	2.50
Lead frame	59.11	Fe	7439-89-9	0.10
		P	7723-14-0	0.03
		Cu	7440-50-8	99.87
Dice	0.77	Si	7440-21-3	100.00

3. Hazards Identification

Health effect(s): N/A
Environmental effect(s): Pb is toxic.
Physical and chemical hazard(s): N/A
Special hazard(s): N/A

4. First-aid Measures

Classification by ways of exposition:
Inhaled: N/A Skin contact: N/A Ingested: N/A
Harmful effect(s) and symptom(s): N/A
Protection to the first-aid personnel: N/A
Note to physicians: N/A

5. Fire-fighting Measures

Suitable fire extinguisher(s): Any extinguishant including CO2, dry powder, foam is suitable.
Hazardous material(s) released during fire-fighting: N/A
Precaution: None

6. Accidental Leak Measures

Personal precaution: N/A
Environmental precaution: N/A

Method(s) for cleaning up: [N/A](#)

7. Safe Handling and Storage Methods

Handling: No special requirement in handling the goods. Do not discard arbitrarily.

Storing condition: [Temperature: 10-40°C](#), [Humidity: 40-80%](#); [Storage time: One year](#)

8. Exposition Preventive Measures

Project control: [N/A](#)

Personal precaution: [N/A](#)

9. Physical and Chemical Properties

State of matter: Solid	Appearance: N/A	Odor: None
Colour: N/A	pH value: N/A	Boiling point/range: N/A
Solubility in water: Not soluble	Fire point: N/A	Decomposition temperature: N/A
Density: N/A	Autoignition temperature: N/A	Vapor pressure: N/A
Flash point: N/A	Test method: N/A	Vapor density: N/A

10. Stability and Reactivity

Stability: Stable	Material(s) to avoid: N/A
Possible reaction under special condition: N/A	Hazardous product(s) released upon decomposition: N/A
Conditions to avoid: N/A	

11. Toxicological Information

Acute toxicity: N/A	Sensitization: N/A
Local effect(s): N/A	Chronic toxicity or long-term toxicity: N/A
Special effect(s): N/A	

12. Ecological Information

Possible effect(s) on environment/environmental distribution: [N/A](#)

13. Disposal

Way of disposal: [Follow the regulations of the local government.](#)

14. Transportation

Overseas regulation(s) on transportation: N/A	UN code: N/A
Local regulation(s) on transportation: N/A	Way of transportation and precaution: This is not a hazardous product. Waterproof, sunproof and no excessive extrusion.

15. Regulations

Applicable regulation(s): [RoHS Directive \(2011/65/EC\)](#)

16. Other Information

Reference to MSDS: [N/A](#)
Other information: [N/A](#)