

## SAFETY DATA SHEET

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### 1. Identification

**Product identifier** Thermal Pad

**Other means of identification**

**Product code** TG-A1780

**Recommended use** Thermal Pad

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer/Supplier** T-GLOBAL TECHNOLOGY CO., LTD

**Address** No.33, Ln. 50, Daren Rd., Taoyuan City, Taoyuan County 330,  
Taiwan

**Emergency telephone number** +886-3-3618899

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### 2. Hazard(s) identification

**Emergency overview** Low hazard under normal conditions.

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**GHS-classification** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** Not applicable.

**Hazard statement** Not applicable.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash thoroughly after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with  
local authority requirements

**Hazard(s) not otherwise classified (HNOC)**

**Supplemental information** This product is not hazardous according to  
OSHA 29 CFR 1910.1200 requirements,  
therefore a hazard label does not apply.

### 3. Composition/information on ingredients

#### Substance/mixture Mixture

Chemical name	CAS Number	Concentration (%)
Aluminum nitride	24304-00-5	22~48
Boron nitride	10043-11-5	3~11
Silicone	68083-18-1	2~5
Aluminum oxide	1344-28-1	33~57

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

#### Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this material does not pose a risk to health

#### Indication of immediate medical attention and special treatment needed

Treat symptomatically.

**General information** Get medical attention if any discomfort develops

### 5. Fire-fighting measures

**Suitable extinguishing media** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** None

#### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

**Fire fighting equipment/instructions** Move containers from fire area if you can do so without risk.

**General fire hazards** This product is not flammable.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Sweep up or gather material and place in appropriate container for disposal.

For waste disposal, see section 13 of the SDS.

**Environmental precautions** Environmental Manager must be informed of all major spillages.

**7. Handling and storage**

**Precautions for safe handling**

Provide adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Observe good industrial hygiene practices. Wear appropriate personal protective equipment (See Section 8).

**Conditions for safe storage, including any incompatibilities**

Store in closed original container in a dry place. Store away from incompatible materials.

**8. Exposure controls/personal protection**

**Occupational exposure limits** No occupational exposure limits noted for the ingredient(s).

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** Follow standard monitoring procedures.

**Appropriate engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Risk of contact: Wear approved safety goggles.

**Skin protection**

**Hand protection** Use suitable protective gloves if risk of skin



contact. Suitable gloves can be recommended by the glove supplier.

**Other** If prolonged or repeated contact is likely, chemical resistant clothing is recommended.

**Respiratory protection** In case of inadequate ventilation, use respiratory protection.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

### 9. Physical and chemical properties

#### Appearance

Physical state	Solid
Form	Solid
Color	Gray
Odor	None.
Odor threshold	Not relevant.
pH	Not relevant.
Melting point/freezing point	Not relevant.
Initial boiling point and boiling range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Not relevant.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower(%)	Not relevant.
Flammability limit - upper(%)	Not relevant.
Explosive limit - lower (%)	Not relevant.



Explosive limit - upper (%)	Not relevant.
Vapor pressure	Not relevant.
Vapor density	Not relevant.
Solubility(ies)	
Solubility (water)	Insoluble ( <0.1%)
Solubility (solvents)	Not relevant.
Partition coefficient	Not relevant.
Auto-ignition temperature	Not relevant.
Decomposition temperature	Not relevant.
Viscosity	Not relevant.
Other information	
Bulk density	Not available.
Density	3.5
Explosive properties	Not relevant.
Oxidizing properties	Not relevant.
VOC	Not relevant.

#### 10. Stability and reactivity

##### Reactivity Chemical stability

The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

##### Possibility of hazardous reactions

Hazardous polymerization does not occur.

##### Conditions to avoid

Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** None.

#### 11. Information on likely routes of exposure

**Inhalation** Elevated temperatures or mechanical action may form dust and fumes which may be irritating to the mucous membranes and respiratory tract.

**Skin contact** Prolonged skin contact may cause temporary irritation.

<b>Eye contact</b>	May cause eye irritation on direct contact.
<b>Ingestion</b>	Ingestion may cause irritation and malaise.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Under normal conditions of intended use, this material does not pose a risk to health.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Inhalation of carbon black dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	None known.

**Further information**                      None known.

**12. Ecological information**

**Ecotoxicity**                                      The product is not classified as environmentally hazardous.

**Persistence and degradability**      No data available.

**Bioaccumulative potential**              No data available.

**Mobility in soil**                              The product is insoluble in water.

**Other adverse effects**                      None known.

**13. Disposal considerations**

**Disposal instructions**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**Contaminated packaging**

Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**    Not regulated as dangerous goods.

**IATA**    Not regulated as dangerous goods.

**IMDG**    Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

This substance/mixture is not intended to be transported in bulk.

### 15. Regulatory information

Trash Clearance Act., Air Pollution Protection Act., Enforcement Rules of the Labor Safety and Health Law, Prevention and Control of Water Pollution Act.

### 16. References

EPA: AQUIRE database

IARC Monographs. Overall Evaluation of Carcinogenicity

NLM: Hazardous Substances Data Base

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