

Material Safety Data Sheet

Issue date 2023/11/28
Revision date 2023/11/28
Version 1

1. Identification

Product Name : Disposable hand warmer
Trade Name :
Company Profile : IRIS Fine Products Co., Ltd.
Address : Kanegase kawane, oogawara-machi, sibata-gun, Miyagi, Japan
Department : Production Technology Section
Phone : 812-24-88-3545
Fax : 812-24-88-3547
Urgent Contact : Production Technology Section
Phone : 812-24-88-3545

2. Hazards(s) Identification

Most important hazard

Hazardous properties: This product may cause a low temperature grade burn if used repeatedly and/or over a prolonged period of time on the same area of skin.

Environmental effect: There is no knowledge of its environmental effect.

3. Composition/Information on Ingredients

Single product or compound: Compound (one compound is filled in the inner bag and then another is packed in the outer bag.)

General Description: Disposable body warmer

	Ingredients	Content (%)	CAS No.
Mixture:	Iron Powder	40 ~ 60	7439-89-6
	Water	15 ~ 30	7732-18-5
	Vermiculite	3 ~ 15	1318-00-9
	Activated Charcoal	3~ 10	7440-44-0
	Salt	0.5 ~ 5	7647-14-5
	Super Absorbent Polymer	1 ~ 5	9003-04-7

Inner Bag (Surface)	Polyethylene	2~10	9002-88-4
	Nylon Non-woven Fabric	0.1~3	25038-54-4

4. First-Aid Measures

For the compound in the inner bag:

When in contact with the skin: Wash with soap and lukewarm water.

When in the eyes: Flush eyes with clean water.

Seek medical attention if conditions persist.

When swallowed: Thoroughly wash inside the mouth, induce vomiting. Seek medical attention if needed.

5. Fire-Fighting Measures

Extinguishing agent: Water, foam, powder, or carbon dioxide fire extinguisher.

Specific Hazard in case of fires: Contact fire-fighting from the upwind direction. Avoid inhalation of generated gas.

Specific fire fighting measures: Evacuate persons to a safe place upwind and conduct fire-fighting from the upwind direction.

Personal protection for the firefighter: Use respiration and fire protection equipment.

6. Accidental Release Measures

For the compound in the inner bag:

Precautions for the human body: Avoid contact with skin.

Precautions for the environment: None

Cleaning method: Sweep up the product and place in a container filled with water.

7. Handling and Storage

Product (in outer package);

Handling precautions: Avoid use near flame or in high temperature. Do not remove the inner bag from the package.

Storage:

Proper storage conditions: Avoid direct sunlight and store in a cool room.
Avoid areas with high temperatures.
Avoid tearing the outer package.

8. Exposure Controls/Personal Protection

For the compound in the inner bag:

Acceptable concentration: Not determined

Protection equipment: Respiration protection: Use respiration protection equipment.

Hand Protection: Use protective gloves.

9. Physical and Chemical Properties

For the compound in the inner bag:

Physical properties

Form: Powdery solid

Color: Black

Odor: No odor

Combustion temperature This product does not ignite at 140°C

Spontaneous combustion properties: This product is not listed as a spontaneous combustible substance by the UN.

Self-heating properties: This product is not listed as a self-heating substance by the UN.

Solubility: This product is not water soluble expect for the

Sodium Chloride.

10. Stability and Reactivity

- Stability: This product is stable under normal conditions.
- Reactivity: This product reacts with oxygen and generates heat.
- Condition to avoid: Do not use this product in high oxygen concentration conditions.
- Hazardous matter generated through product decomposition: None
-

11. Toxicological Information

- Acute Toxicity: Oral and skin toxicity: No data
-

12. Ecological Information

- Mobility: No data
- Residual effect and degradability: No data
- Accumulative effect on human body: No data
-

13. Disposal Considerations

- Product/Compound: This product should be increased at the facilities, or disposed of at an approved waste disposal facilities by the government. In case of household disposal, it should be treated as non-burnable trash.
-

14. Transport Information

- UN classification: This product is not listed as a dangerous substance by UN recommendation.
- Specific conditions and measures for ship transport:
- Avoid getting it wet or the careless treatment of the product.
- Avoid the falling, dropping, or damaging of the product when transporting and/or carrying out measures to avoid collapse of the piles.
-

15. Regulatory Information

- Law for Safety of Vessels: Section 7, Article 3, of the regulations for ship transport and storage of dangerous substances (danger regulation). This product is not listed as a

flammable, spontaneous combustion or self-heating substance.

Aviation Law:

This product is not listed in Article 2 in the notification of transport criteria for explosive substance by aircraft. This product is not listed as a flammable substance, spontaneous combustion, or self-heating substance.

Hazardous Substance:

The specified value of this product meets substance for landfill, as described in Article 1 of governmental regulations regarding the criteria for industrial disposal of metallic substances.

16. Other information

Date of preparation : 2023/11/28

Version number : 1

Data sources:

The descriptions in this Safety Data Sheet are based on the materials, information, and data available at this moment, but may be revised due to revisions to laws and regulations or new findings. When handling this product, please refer to the descriptions and take safety measures in line with the actual situation at your own risk. This Safety Data Sheet is not a guarantee of safety or quality.