

## Safety Data Sheet (SDS)

### 1 Identification of the substance and of the company

- .Productname: *Warming Packs (6690, 6692, 6695, 6997)*
- .Productcode: *Hand Warmer, Toe Warmer, Large Warmer, Foot Insole Warmer, Shoulder Warmer, Heat Patch, Body Warmer*
- .Address: *1021 Bandana Blvd. E. Suite 220, Saint Paul, MN 55108 United States*
- .Tel: *651-200-6010*
- .E-mail: *Dan.Reider@ergodyne.com*
- .Contact: *Dan Reider*

### 2 Hazards identification

- .Classification of the substance or mixture-Classification according to GHS :  
*Self-heating Substances (Category 2); Acute toxicity, swallowed (Category 5) ; Eye irritation (Category 2A)*
- .Labelling according to GHS: *The product is labeled according to the GHS.*

#### .GHS Hazard pictograms:



GHS02



GHS07

- .GHS Signal words: *Warning*

#### . Hazard statement(s):

- H252 Self-heating in large quantity; may burn.*
- H303 May be harmful if swallowed.*
- H319 Causes serious eye irritation.*

#### . Precautionary statement(s):

- P235+P410 Keep cool, Protect from sunlight.*
- P264 Wash thoroughly after handling.*
- P280 Wear protective gloves / protective clothing / Wear protective goggles / face protection.*

#### . Response Precautionary Statements:

- P301+P312 IF SWALLOWED: if feel unwell, call a poison center or doctor. P330 Gargle.*
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.*
- Remove contact lenses, if present and easy to do. Continue rinsing.*
- P337+P313 If eye irritation persists: Get medical advice / attention.*

#### . Storage Precautionary Statements:

- P407 Stacks / should be no gaps between the tray. P420 Away from other materials.*

#### . Disposal Precautionary Statements:

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation.*



### 3 Composition/information on ingredients

*.Description: Mixture of substances listed below with additions.*

<i>Components Name</i>	<i>CAS Number</i>	<i>Approximate(%)by Wt.</i>
<i>Iron Powder</i>	<i>7439-89-6</i>	<i>48%</i>
<i>Water</i>	<i>7732-18-5</i>	<i>21%</i>
<i>Vermiculite</i>	<i>1318-00-9</i>	<i>5%</i>
<i>Activated carbon</i>	<i>7440-44-0</i>	<i>16%</i>
<i>Sodium Chloride</i>	<i>7647-14-5</i>	<i>5%</i>
<i>Polyethylene Film</i>	<i>9002-88-4</i>	<i>3%</i>
<i>Polypropylene (PP)</i>	<i>9003-07-0</i>	<i>2%</i>

### 4 First aid measures

**Generally not hazardous in normal handling, however good laboratory practices should always be used. Avoid internal materials exposure to skin or eyes, and inhalation of processed dust.**

*.Inhalation:* Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

*.Eye:* Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

*.Skin:* Flush skin with plenty of water for a few minutes ,Get medical aid If irritation develops or persists.

*.Ingestion:* If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

### 5 Fire-fighting measures

**.General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Non-combustible, substance itself does not burn.

**.Suitable extinguishing media:** Water, CO<sub>2</sub>, Dry Chemicals, Foam-Fog.

**.Fire/Explosion Hazards:** Burning will release toxic gases or fumes, Negligible Explosion hazard.

**.Fire Fighting Procedure:** Wear self contained breathing apparatus meeting NIOSH standards.

### 6 Accidental release measures

**.Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**.Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the SDS and with local authorities.

## 7 Handling and storage

**The regulations relating to storage remises apply to workshop where the product is handled :**

- .Handling:** Removal of mobile products need to wear protective gloves when products for the brittle materials, handled with care when handling. Apply good manufacturing practice & industrial hygiene practices. Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Wear protective goggles and gloves when handling material. Clean cloths, must be worn. Observe all warnings and precautions listed for the product.
- .Storage:** Store in a cool & dry area away from heat sources & protected from light. stored in relatively stable areas, to avoid collision occurred on a hard object. Avoid dust formation and control ignition sources. Keep air contact to a minimum.
- .Further information about storage condition:** None.

## 8 Exposure controls/personal protection

- .Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- .Personal Protection:** Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
- .Protective Gloves:** Protective Gloves.
- .Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- .Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- .Health measures:** Local exhaust ventilations may be necessary for some operation.

## 9 Physical and chemical properties

<b>.General Information</b>	
<b>Form:</b>	Solid Powder in Non-woven bag
<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>.Change in condition</b>	
<b>Melting point/Melting range:</b>	Not available
<b>Boiling point/Boiling range:</b>	Not available
<b>.Self-igniting:</b>	Product is not self-igniting
<b>.Danger of explosion:</b>	Not available
<b>.Density:</b>	
<b>.Relative density:</b>	> 1 (Water=1)
<b>.Vapor density:</b>	Not available
<b>.Evaporation rate</b>	Not available
<b>.Solubility in/Miscibility with</b>	
<b>Water:</b>	Slight soluble
<b>.PH-Value:</b>	Not available

**10 Stability and reactivity**

- .Chemical Stability: Stable under normal temperatures and pressures.*
- .Decomposition Products: The following combustion products may be generated: Metal oxide and water.*
- .Materials with which substance is incompatible: Products can chemical reactions halides, strong oxidizers, strong acids.*
- .Hazardous Polymerizations: Will not occur.*
- .Special Remarks on Reactivity: Not available.*

**11 Toxicological information**

- .Toxicity to Animals:*
  - LD50: Not available.*
  - LC50: Not available.*
- .Other Toxic Effects on Humans: Not available.*
- .Special Remarks on Chronic Effects on Humans: Not available.*
- .Special Remarks on other Toxic Effects on Humans: Not available.*

**12 Ecological information**

- .Ecotoxicity: Not available.*
- .Products of Biodegradation: None hazardous short term degradation products are not likely.*
- .Water Danger/Protection: Water hazard class 0 (German Regulation) (Self-assessment): No hazardous for water.*

**13 Disposal considerations**

- .Product: Must be disposed of in accordance with applicable Federal, state and local regulations.*
- .Recommendation: Must not be dispose together with household garbage.*
- .Uncleaned packaging: Recommendation Disposal must be made according to official regulations.*

**14 Transport information**

- .UN Proper Shipping Name: N.O.S*
- .UN Number: Not available.*
- .Packing Group: Not available.*
- .Marine Pollutant: Not available.*
- .Hazardous Substance Reportable Quantity: Not available.*
- .Special Provisions for Transport: Not applicable.*
- .DOT Classification: Not a DOT controlled material (United States).*
- .TDG Classification: Not controlled under TDG (Canada).*
- .ADR/RID Classification: Not controlled under ADR( Europe).*
- .IMO/IMDG Classification: Not Controlled under IMDG.*
- .ICAO/IATA Classification: Not controlled under IATA.*

## 15 Regulatory information

*.This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, dusts and fumes from this product may be hazardous.*

*Toxic Substances Control Act (TSCA): Some components are listed in TSCA inventory.*

*Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.*

*CERCLA Hazardous Substances and corresponding RQs: None of the chemicals in this material have an RQ.*

*Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.*

*SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.*

*OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.*

*California Prop 65-California No Significant Risk Level: None of the chemicals in this product are listed.*

*REACH Regulation List of Substances of very high concern (SVHC): None of the ingredients is listed.*

## 16 Other information

*The contents and format of this SDS are in accordance with ISO Commission Directive ISO11014:2009.*

### **DISCLAIMER OF LIABILITY**

*The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.*

### **• Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).*

*IMDG: International Maritime Code for Dangerous Goods.*

*IATA: International Air Transport Association.*

*ICAO: International Civil Aviation Organization.*

*TDG: Transportation of Dangerous Goods Program of Canada.*

*DOT: U.S. Department of Transportation.*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals.*

*CAS: Chemical Abstracts Service (division of the American Chemical Society).*

*ACGIH: American Conference of Governmental Industrial Hygienists.*

*NFPA: National Fire Protection Association.*

*TSCA: Toxic Substances Control Act.*

*LC50: Lethal concentration, 50 percent.*

*LD50: Lethal dose, 50 percent.*

*PBT: Persistent, Bioaccumulative and Toxic.*

*vPvB: very Persistent and very Bioaccumulative.*

\*\*\*\*\*The End\*\*\*\*\*