1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name:</th>
<th>TECHNOMELT PA 657 BK</th>
<th>IDH number:</th>
<th>251715</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product type:</td>
<td>Hotmelt adhesive</td>
<td>Item number:</td>
<td>OM-657-I3</td>
</tr>
<tr>
<td>Restriction of Use:</td>
<td>None identified</td>
<td>Region:</td>
<td>United States</td>
</tr>
<tr>
<td>Company address:</td>
<td>Henkel Corporation</td>
<td>Contact information:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One Henkel Way</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rocky Hill, Connecticut 06067</td>
<td>Telephone: (860) 571-5100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEDICAL EMERGENCY Phone: Poison Control Center</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-877-671-4608 (toll free) or 1-303-592-1711</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TRANSPORT EMERGENCY Phone: CHEMTREC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-800-424-9300 (toll free) or 1-703-527-3887</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet: <a href="http://www.henkelna.com">www.henkelna.com</a></td>
<td></td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

MOLTEN ADHESIVE MAY CAUSE SEVERE BURNS.
VAPORS ABOVE MOLTEN ADHESIVE MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE IGNITION.

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>HAZARD CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

PICTOGRAM(S)

None

Precautionary Statements

Prevention: Not prescribed
Response: Not prescribed
Storage: Not prescribed
Disposal: Not prescribed


See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS Number</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.
4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

Skin contact: Molten adhesive may cause severe burns. Cool melted product on skin with plenty of water. Do not remove solidified product. Cover affected areas with clean sheeting or gauze and seek immediate medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing as damaged skin can be easily torn.

Eye contact: If eye contact occurs with molten material immediately cool with water. Do not remove adhesive. Seek medical attention.

Ingestion: Ingestion of solid adhesive is not expected to be hazardous. If symptoms develop and persist, get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide. Use extinguishing measures appropriate to local circumstances and the surrounding environment.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray.


6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow material to contaminate ground water system.

Clean-up methods: Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Sweep up spilled material. Avoid creating dust.

7. HANDLING AND STORAGE

Handling: Do not place wet or damp solid into melt tank. Follow suggested application temperature. Always be careful around molten material. Avoid skin contact with molten resins. Do not wear contact lenses. Avoid dust formation.

Storage: Keep cool in accordance with information on label and in Technical Data Sheets.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>3 mg/m³ TWA Inhalable fraction.</td>
<td>3.5 mg/m³ PEL</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Ventilation hoods and fans required when working with organic solvents or in hot melt applications. Heat only in areas with appropriate exhaust ventilation.

Respiratory protection: Solid Resin: Dust safety masks are recommended when the potential for dust inhalation exists. Molten Resin: Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Do not wear contact lenses.

Skin protection: Insulated gloves and long sleeved clothing are strongly recommended when working with molten adhesive.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid
Color: Black
Odor: Mild
Odor threshold: Not available.
PH: Not applicable
Vapor pressure: Not applicable
Boiling point/range: Not available.
Melting point/ range: Not available.
Specific gravity: 0.98
Vapor density: Not available.
Flash point: Product is a solid.
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: Not available.
Flammability: Not applicable
Evaporation rate: Not available.
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): Not available.
VOC content: 0 %
Viscosity: 3,000 - 4,500 mPa.s
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.
Hazardous reactions: Will not occur.
Hazardous decomposition products: Carbon dioxide, carbon monoxide and irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion. Oxides of nitrogen.
Reactivity: Not available.
Conditions to avoid: Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material. Take measures to prevent the build-up of electrostatic charges.
11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: Continuous breathing of vapors above molten adhesive may irritate mucous membranes. Dusts from solid adhesive may cause irritation.

Skin contact: Molten adhesive may cause severe burns. Solid adhesive has no hazards.

Eye contact: Molten adhesive in eyes will cause severe and permanent damage. Can cause mechanical irritation if dusts are generated.

Ingestion: Not expected under normal conditions of use.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>Oral LD50 (Rat) = &gt; 8,000 mg/kg</td>
<td>Respiratory, Some evidence of carcinogenicity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>No</td>
<td>Group 2B</td>
<td>No</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis.

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Alicia Griffin, Regulatory Affairs Specialist
Issue date: 05/02/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user’s responsibility to determine the suitability of Henkel’s products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel’s products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel’s products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.