

30851259 THERMOGRIP (R) 1378 Revision Date 28-Jul-2017 Supersedes Date: 20-Apr-2015 Version 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

| Product Name | THERMOGRIP (R) 1378 |
|--------------|---------------------|
| Product Code | 30851259 |

Product(s) Covered See section 16 for more information

1.2. Relevant identified uses of the substance or mixture and uses advised against

| Recommended use | Hot-melt adhesives. |
|----------------------|--------------------------|
| Uses Advised Against | No information available |

1.3. Details of the supplier of the safety data sheet

Responsible Party

Bostik Inc. 11320 W. Watertown Plank Road Wauwatosa, Wisconsin 53226 USA Phone: +1 (800) 843-0844 (Domestic Toll Free) Phone: +1 (414) 774-2250 (International) Fax: +1 (414) 774-8075

E-mail msds@bostik-us.com

1.4. Emergency telephone number

Telephone: 1-800-227-0332 (Outside U.S.) 1-703-527-3887

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200.

2.2. Label Elements

EMERGENCY OVERVIEW Contact with solid material may cause irritation Contact with molten material will cause thermal burns Appearance Solid Odor No information available Precautionary Statements - Prevention Not applicable Precautionary Statements - Response Not applicable Not applicable

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Precautionary Statements - Storage Not applicable

Precautionary Statements - Disposal Not applicable

Hazards Not Otherwise Classified (HNOC) Not applicable

Unknown acute toxicity

47% of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other Information

No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical Name | CAS No. | Weight-% |
|---------------|-----------|----------|
| Carbon black | 1333-86-4 | 0.1 - 1 |

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200.

| Section 4: FIRST AID MEASURES | | |
|---------------------------------------|---|--|
| 4.1. Description of first aid measure | <u>es</u> | |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. | |
| Skin Contact | Wash skin with soap and water. In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Removal of solidified molten material from skin requires medical assistance. Consult a physician if necessary. | |
| Inhalation | Remove to fresh air. | |
| Ingestion | Seek medical advice immediately. Do not induce vomiting without medical advice. | |
| 4.2. Most important symptoms and | effects, both acute and delayed | |
| Symptoms | No information available. | |
| 4.3. Indication of any immediate me | edical attention and special treatment needed | |
| Note to physicians | Treat symptomatically. | |
| 4.4. Reference to Other Sections | | |
| Reference to Other Sections | Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 11: TOXICOLOGY INFORMATION | |

Section 5: FIRE-FIGHTING MEASURES

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5.1. Extinguishing media

Suitable Extinguishing Media

In case of fire: Use CO2, dry chemical, or foam to extinguish.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Specific Hazards Arising from the Chemical

Avoid dusting when handling and avoid all possible sources of ignition (spark or flame). This material can accumulate static charge by flow or agitation and can be ignited by static discharge.

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None.

Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3. Advice for firefighters

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

| Personal Precautions | Ensure adequate ventilation, especially in confined areas. | |
|-------------------------------------|--|--|
| 6.2. Environmental precautions | | |
| Environmental Precautions | Keep out of drains, sewers, ditches and waterways. See Section 12 for additional Ecological Information. | |
| 6.3. Methods and material for conta | inment and cleaning up | |
| Methods for Containment | Molten . Cover with dry sand/earth. | |
| Methods for Cleaning up | Use personal protection equipment. Solid: . Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Molten . Where possible allow molten material to solidify naturally. Clean contaminated surface thoroughly. | |
| 6.4. Reference to other sections | | |
| Reference to Other Sections | Section 7: HANDLING AND STORAGE Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 13: DISPOSAL CONSIDERATIONS | |

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on Safe Handling

Avoid contact with skin, eyes or clothing. Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors. After contact with

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|---------------------|--|
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| | skin, wash immediately with plenty of water and soap. This material can accumulate static charge by flow or agitation and can be ignited by static discharge. Avoid dusting when handling and avoid all possible sources of ignition (spark or flame). |
|---------------------------------------|--|
| 7.2. Conditions for safe storage, inc | luding any incompatibilities |
| Storage Conditions | Store away from incompatible materials. |
| Incompatible Materials | Incompatible with oxidizing agents. Strong acids. Strong bases. |
| 7.3. Specific end use(s) | |
| OTHER INFORMATION | Since empty containers retain product residue, follow label warnings even after container is emptied. Keep product and empty container away from heat and sources of ignition. |
| 7.4. References to Other Sections | |
| Reference to Other Sections | Section 13: DISPOSAL CONSIDERATIONS Section 10: STABILITY AND REACTIVITY |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Guidelines

. As Carbon black (1333-86-4) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

| Chemical Name | ACGIH TLV | NIOSH IDLH | OSHA PEL | Mexico |
|---------------------------|---|--|----------------|---------------------------------|
| Carbon black 1333-86-4 | TWA: 3 mg/m ³ inhalable particulate matter | IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH | TWA: 3.5 mg/m³ | TWA: 3.5 mg/m³ STEL: 7 mg/m³ |

| Chemical Name | Argentina | Brazil | Chile | Venezuela |
|---------------|----------------------------|--------|-------|----------------------------|
| Carbon black | TWA: 3.5 mg/m ³ | - | - | TWA: 3.5 mg/m ³ |
| 1333-86-4 | | | | |

8.2. Exposure controls

| Engineering Controls | Showers | |
|----------------------|----------------------|--|
| | Eyewash stations | |
| | Ventilation systems. | |

| Personal protective equipment [PP | E] |
|-----------------------------------|---|
| Eye/Face Protection | Molten . Wear protective eye glasses for protection against liquid splashes. |
| Skin and Body Protection | Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Heat resistant gloves are recommended when handling molten materials. |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General Hygiene Consideration | s Facilities for quickly drenching the body should be provided within the immediate work area for emergency use where there is a possibility of exposure. |

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| <u>9.1. Information on basic physical a</u> Physical State Appearance Color Odor Odor Threshold | and chemical properties Solid Solid Black No information available No information available | | |
|---|--|---|--|
| Property pH Melting Point/Freezing Point Boiling Point Flash Point Evaporation Rate Flammability (solid, gas) Flammability Limit in Air Upper Flammability Limit Lower Flammability Limit Vapor Pressure Vapor Density Relative Density | Values_ No information available No information available 246 °C / 475 °F No information available No information available No information available No information available No information available No information available | Remarks • Method Water Solubility Solubility in Other Solvents Partition Coefficient Autoignition Temperature Decomposition Temperature | No information available No information available No information available No information available |
| Kinematic Viscosity | No information available | | |
| Dynamic Viscosity | 8000 mPa s | Spindle 27 @ 10 rpm @ | 400 °F |
| Explosive Properties Oxidizing Properties | No information available No information available | | |
| 9.2. Other information Softening Point Molecular Weight Solvent Content (%) Solid Content (%) Density VOC | @ 330 °F No information available No information available 100 .910 g/cm³ No information available | | |

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical Stability

Stable under recommended storage conditions.

10.3. Possibility of Hazardous Reactions

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None under normal processing.

10.4. Conditions to Avoid

Do not add water or other volatile material to molten adhesive. Take precautionary measures against static discharges.

10.5. Incompatible Materials

Incompatible with oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on Toxicological Effects

| Product Information | No Data Available |
|---------------------|--------------------|
| Inhalation | No Data Available. |
| Eye contact | No Data Available. |
| Skin Contact | No Data Available. |
| Ingestion | No Data Available. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|--------------------------|-------------------|-----------------|
| Carbon black | LD 50 > 8000 mg/kg (rat) | > 3 g/kg (Rabbit) | - |
| 1333-86-4 | OECD 401 | | |

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

| Symptoms Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Irritation | No information available. No information available. No information available. No information available. |
|--|--|
| Corrosivity | No information available. |
| Sensitization | No information available. |
| Germ Cell Mutagenicity | No information available. |
| Reproductive Toxicity | No information available. |
| Developmental Toxicity | No information available. |
| Teratogenicity | No information available. |
| STOT - Single Exposure | No information available. |
| STOT - Repeated Exposure | No information available. |
| Chronic Toxicity | No information available. |
| Target Organ Effects | No information available. |
| Aspiration Hazard | No information available. |
| Carcinogenicity | The table below indicates w |
| U I | As Carbon black (1333-86-/ |

The table below indicates whether each agency has listed any ingredient as a carcinogen. As Carbon black (1333-86-4) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|----------|-----|------|
| Carbon black | A3 | Group 2B | - | Х |
| 1333-86-4 | | - | | |

ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Confirmed animal carcinogen with unknown relevance to humans IARC (International Agency for Research on Cancer) Group 2B - Possibly Carcinogenic to Humans

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OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

| Chemical Name | Algae/Aquatic Plants | Fish | Toxicity to Microorganisms | Crustacea |
|---------------|--------------------------|-------------------------|-------------------------------|-----------------------|
| Carbon black | >10000 mg/l (Desmodesmus | >1000 mg/l (Brachydanio | | EC50 24 h > 5600 mg/L |
| 1333-86-4 | subspicatus) OECD 202 | rerio) OCDE 203 | | (Daphnia magna) |

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulative Potential

No information available.

12.4. Mobility in Soil

No information available.

12.5 Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

| Disposal of Wastes | It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations |
|--|---|
| Contaminated Packaging | Dispose of in accordance with federal, state and local regulations |
| Section 14: TRANSPORTATION INFORMATION | |

| DOT | Not regulated |
|------|---------------|
| IATA | Not regulated |
| IMDG | Not regulated |

Section 15: REGULATORY INFORMATION Global Inventories

| TSCA | Listed |
|------|--------|
| DSL | Listed |

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Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL - Canadian Domestic Substances List
 Listed - The components of this product are either listed or exempt from listing on inventory.
 Not Listed - One or more components of this product are not listed on inventory.

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

Non-controlled

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| Acute Health Hazard | No |
|-----------------------------------|----|
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation.

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Product(s) Covered

30800834 30851259 30851771

Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet No information available

Key Literature References and Sources for Data No information available

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| Prepared By | Product Safety & Regulatory Affairs |
|------------------------|-------------------------------------|
| Revision Date | 28-Jul-2017 |
| Revision Note | Not applicable. |
| Training Advice | No information available |
| Additional information | No information available |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet