

**THERMOGRIP(R) 284-332**  
Revision Number 2

Revision Date 29-Nov-2018  
Supersedes Date: 15-Sep-2014

## 1. Identification

### 1.1. Product Identifier

**Product Name** THERMOGRIP(R) 284-332

### 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.com

### 1.4. Emergency telephone number

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

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Skin sensitization	Category 1
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### 2.2. Label Elements

#### EMERGENCY OVERVIEW

#### WARNING

#### Hazard statements

May cause an allergic skin reaction



Contact with solid material may cause irritation  
Contact with molten material will cause thermal burns

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<b>Appearance</b> No information available	<b>Physical State</b> Solid	<b>Odor</b> Acidic
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## Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves

## Precautionary Statements - Response

Specific treatment (see first aid measures on this label)  
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

## Precautionary Statements - Storage

Not applicable

## Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards Not Otherwise Classified (HNOC)

Not applicable

## Unknown acute toxicity

95 % of the mixture consists of ingredient(s) of unknown toxicity

## 2.3. Other Information

May be harmful if swallowed. May be harmful in contact with skin.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Rosin	8050-09-7	60 - 100
Kaolin	1332-58-7	1 - 5

*\*The exact percentage (concentration) of composition has been withheld as a trade secret.*

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	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. May cause sensitization by skin contact. In the case of skin irritation or allergic reactions see a physician.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Seek medical advice immediately. Do not induce vomiting without medical advice.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

## 4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization of susceptible persons.

## 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**

### 5.1. Extinguishing media

#### **Suitable extinguishing media**

In case of fire: Use CO<sub>2</sub>, 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. Product is or contains a sensitizer. May cause sensitization by skin contact.

#### **Explosion Data**

**Sensitivity to mechanical impact**

None.

**Sensitivity to static discharge**

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 Use personal protective equipment as required. Avoid contact with eyes and skin.

### 6.2. Environmental precautions

Environmental precautions Keep out of drains, sewers, ditches and waterways.

### 6.3. Methods and material for containment 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

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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. After contact with skin, wash immediately with plenty of water and soap. Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors. 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, including 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)

**Specific Use(s)**  
Hot-melt adhesives.

**Other information** No information available.

### 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

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Rosin 8050-09-7	-	TWA: 0.1 mg/m <sup>3</sup> Formaldehyde	-	TWA: 0.1 mg/m <sup>3</sup>
Kaolin 1332-58-7	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>

Chemical Name	Argentina	Brazil	Chile	Venezuela
Rosin 8050-09-7	-	-	-	TWA:
Kaolin 1332-58-7	TWA: 2 mg/m <sup>3</sup>	-	TWA: 13 mg/m <sup>3</sup> TWA: 4.5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

### 8.2. Exposure controls

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**Engineering controls**                      Showers  
   Eyewash stations  
   Ventilation systems.

**Personal protective equipment [PPE]**

**Eye/face protection**                      **Molten** . If splashes are likely to occur, wear safety glasses with side-shields.  
**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 considerations**        Facilities for quickly drenching the body should be provided within the immediate work area for emergency use where there is a possibility of exposure.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

**Physical State**                                Solid  
**Color**    Amber  
**Odor**    Acidic  
**Odor Threshold**                                No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	> 204 °C / > 400 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability or explosive limits	No information available	
Lower flammability or explosive limits	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Water Solubility	No information available	
Solubility in Other Solvents		
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	1350 mPa s	Spindle 27 @ 100 rpm @ 200 °F
Explosive properties	No information available	
Oxidizing properties	No information available	

**9.2. Other information**

**Softening Point**                                @ 150 °F  
**Molecular Weight**                              No information available  
**Solvent content (%)**                              No information available  
**Solid content (%)**                                100  
**Density**    1.100 g/cm<sup>3</sup>  
**VOC (volatile organic compound)**            No information available

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## 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

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 (CO<sub>2</sub>). Hydrocarbons.

## Section 11: TOXICOLOGY INFORMATION

### 11.1. Information on toxicological effects

<b>Product information</b>	No data available
<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	Based on available data, the classification criteria are not met.
<b>Skin contact</b>	May cause sensitization by skin contact.
<b>Ingestion</b>	Based on available data, the classification criteria are not met.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Rosin 8050-09-7	>2800 mg/Kg (rat)	> 2500 mg/kg ( Rabbit )	= 1.5 mg/L ( Rat ) 4 h
Kaolin 1332-58-7	LD50 (rat) > 2000 mg/kg	> 5000 mg/kg ( Rat )	1.5 mg/l 4hr

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Symptoms</b>	No information available.
<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Irritation</b>	No information available.
<b>Corrosivity</b>	No information available.
<b>Sensitization</b>	May cause sensitization by skin contact.
<b>Germ Cell Mutagenicity</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>Developmental Toxicity</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.

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**Chronic Toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

**Target Organ Effects** Eyes, Respiratory system, Skin, Thyroid.

**Aspiration hazard** No information available.

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, OSHA, IARC or NTP at or above 0.1 wt%.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Rosin 8050-09-7	EC50: =400mg/L (72h, Desmodesmus subspicatus)	LC50 (96h) >10mg/L Fish (Danio rerio)	EC50 = 31.5 mg/L 30 min	EC50 48 h >100 mg/L (Daphnia magna )
Kaolin 1332-58-7	IC 50 (72h) > 1000 mg/l	LC 50 (96h) > 1000 mg/l		EC 50 (48h) > 1000 mg/l (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.

### 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: TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

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## Section 15: REGULATORY INFORMATION

### Global Inventories

TSCA	Listed
DSL	Listed

#### 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.

### 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	Yes
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  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## Section 16: OTHER INFORMATION

#### 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

Prepared By	Product Safety & Regulatory Affairs
Revision Date	29-Nov-2018
Revision note	SDS sections updated, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16.
Training Advice	No information available
Further information	No information available



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## **Disclaimer**

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**End of Safety Data Sheet**