

SAFETY DATA SHEET

Balance Pad Formulation



Section 1. Identification

GHS product identifier : Balance Pad Formulation
Product code : 14600-615
Other means of identification : Not available.
Product type : Solid.

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

Identified uses : Tire repair.

Manufacturer : Patch Rubber Company
100 Patch Rubber Road
Weldon, NC 27890
United States
Phone: (252)536-2574

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887
24/7

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

This product is considered to be a manufactured article in the country for which this Safety Data Sheet is written. Only the information required by the country's enforced GHS version are shown in this SDS.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.



Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

Ingredient name	%	CAS number
Barium sulfate	60 - 80	7727-43-7
Carbon black	1 - 5	1333-86-4
Distillates (petroleum), hydrotreated heavy naphthenic	1 - 5	64742-52-5
Crystalline silica, respirable powder	1 - 5	14808-60-7
Zinc oxide	0.1 - 1	1314-13-2
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	0.1 - 1	61617-00-3
1,3-Diphenylguanidine	0.1 - 1	102-06-7
di(Benzothiazol-2-yl) Disulphide	0.1 - 1	120-78-5

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Not applicable.
Inhalation : Not applicable.
Skin contact : Not applicable.
Ingestion : Not applicable.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Not applicable.
Specific treatments : No specific treatment.
Protection of first-aiders : No special protection is required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
metal oxide/oxides

Special protective actions for fire-fighters : No special measures are required.

Special protective equipment for fire-fighters : No special precaution is required.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Put on appropriate personal protective equipment.

For emergency responders : None required.

Environmental precautions : Not applicable.

Methods and materials for containment and cleaning up

Spill : Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : No special measures are required.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Barium sulfate	ACGIH TLV (United States, 3/2018). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction TWA: 10 mg/m ³ 10 hours. Form: Total OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
Carbon black	NIOSH REL (United States, 10/2016). TWA: 3.5 mg/m ³ 10 hours. TWA: 0.1 mg of PAHs/cm ³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 3.5 mg/m ³ 8 hours. ACGIH TLV (United States, 3/2018). TWA: 3 mg/m ³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States, 3/2018). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m ³ 10 hours. Form: Respirable dust OSHA PEL (United States, 5/2018). TWA: 50 µg/m ³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 3/2018). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes STEL: 10 mg/m ³ 15 minutes. Form: Fertilizer and/or industrial use. OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Fertilizer and/or industrial use. TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2018). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction STEL: 10 mg/m ³ 15 minutes. Form: Respirable fraction
Crystalline silica, respirable powder	OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable NIOSH REL (United States, 10/2016). TWA: 0.05 mg/m ³ 10 hours. Form: Respirable dust OSHA PEL (United States, 5/2018). TWA: 50 µg/m ³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 3/2018). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes STEL: 10 mg/m ³ 15 minutes. Form: Fertilizer and/or industrial use. OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Fertilizer and/or industrial use. TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2018). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction STEL: 10 mg/m ³ 15 minutes. Form: Respirable fraction
Zinc oxide	None. None. None.
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt 1,3-Diphenylguanidine di(Benzothiazol-2-yl) Disulphide	None. None. None.

Canada

Occupational exposure limits

Ingredient name	Exposure limits
Barium sulfate	CA British Columbia Provincial (Canada, 7/2018). TWA: 5 mg/m ³ 8 hours. Form: Inhalable CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m ³ 8 hours. Form: Respirable dust TWAEV: 10 mg/m ³ 8 hours. Form: Total dust CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m ³ 15 minutes. TWA: 10 mg/m ³ 8 hours.
Carbon black	CA British Columbia Provincial (Canada, 7/2018). TWA: 3 mg/m ³ 8 hours. Form: Inhalable CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 3.5 mg/m ³ 8 hours. CA Quebec Provincial (Canada, 1/2014).

Section 8. Exposure controls/personal protection

Distillates (petroleum), hydrotreated heavy naphthenic	<p>TWAEV: 3.5 mg/m³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction CA Saskatchewan Provincial (Canada, 7/2013). STEL: 7 mg/m³ 15 minutes. TWA: 3.5 mg/m³ 8 hours. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 5 mg/m³ 8 hours. Form: Mist 15 min OEL: 10 mg/m³ 15 minutes. Form: Mist CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m³ 8 hours. Form: Mist STEV: 10 mg/m³ 15 minutes. Form: Mist</p>
Crystalline silica, respirable powder	<p>CA British Columbia Provincial (Canada, 7/2018). TWA: 0.025 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: Respirable fraction CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate. CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m³ 8 hours. Form: Fertilizer and/or industrial use. STEV: 10 mg/m³ 15 minutes. Form: Fertilizer and/or industrial use.</p>
Zinc oxide	<p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m³ 8 hours. Form: Respirable 15 min OEL: 10 mg/m³ 15 minutes. Form: Respirable CA British Columbia Provincial (Canada, 7/2018). TWA: 2 mg/m³ 8 hours. Form: Respirable STEL: 10 mg/m³ 15 minutes. Form: Respirable CA Saskatchewan Provincial (Canada, 7/2013). STEL: 10 mg/m³ 15 minutes. Form: Respirable dust and fume. TWA: 2 mg/m³ 8 hours. Form: Respirable dust and fume. CA Ontario Provincial (Canada, 1/2018). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction</p>

Appropriate engineering controls : Not applicable.

Environmental exposure controls : Not applicable.

Individual protection measures

Hygiene measures : Follow good industrial hygiene practice.

Eye/face protection : Safety glasses.

Skin protection

Hand protection : Natural rubber (latex).

Body protection : Lab coat.

Other skin protection : None required.

Respiratory protection : None required.

Section 9. Physical and chemical properties

Appearance

Physical state	: Solid. [Rubber.]
Color	: Black.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point/boiling range	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 2.26 to 2.3
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Highly reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Carbon black	LD50 Oral	Rat	>15400 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	LD50 Oral	Rat	390 mg/kg	-
1,3-Diphenylguanidine	LD50 Oral	Rat	323 mg/kg	-
di(Benzothiazol-2-yl) Disulphide	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	>12 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	Eyes - Mild irritant	Rabbit	-	0.1 g	-

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Carbon black	-	2B	-
Crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Target organs
1,3-Diphenylguanidine	Category 3	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Crystalline silica, respirable powder	Category 1	respiratory tract
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	Category 2	liver and spleen

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Long term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

Potential chronic health effects

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Barium sulfate	Acute EC50 634 mg/L Fresh water	Crustaceans - Cypris subglobosa	48 hours
Carbon black	Acute EC50 32 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
Zinc oxide	Acute EC50 37.563 mg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute IC50 1.85 mg/L Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Zinc oxide	-	28960	high
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	-	1.017	low
1,3-Diphenylguanidine	2.42	<20	low
di(Benzothiazol-2-yl) Disulphide	4.5	1.4 to 51	low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

AERG : Not applicable

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.
Clean Water Act (CWA) 307: 1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt; Zinc oxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	Classification
Crystalline silica, respirable powder	CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) (inhalation) - Category 1
1,3-Dihydro-4(or 5)-methyl-2H-benzimidazole-2-thione, zinc salt	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (liver, spleen) - Category 2
1,3-Diphenylguanidine	ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Fertility) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
di(Benzothiazol-2-yl) Disulphide	SKIN SENSITIZATION - Category 1


SARA 313

There is no data available.

State regulations

- Massachusetts** : The following components are listed: Barium sulfate; Crystalline silica, respirable powder; Distillates (petroleum), hydrotreated heavy naphthenic; Carbon black
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Barium sulfate; Crystalline silica, respirable powder; Carbon black
- Pennsylvania** : The following components are listed: Barium sulfate; Crystalline silica, respirable powder; Carbon black

California Prop. 65

 **WARNING:** This product can expose you to chemicals including Carbon black and Crystalline silica, respirable powder, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Canadian lists

- Canada inventory (DSL NDSL)** : All components are listed or exempted.
- Canadian NPRI** : None of the components are listed.
- CEPA Toxic substances** : None of the components are listed.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue mm/dd/yyyy	: 10/30/2019
Date of previous issue	: 02/15/2018
Version	: 2
Prepared by	: KMK Regulatory Services Inc.
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.