

HDCA
 Revision Number 2

Revision Date 12-Dec-2018
 Supersedes Date: 03-Nov-2016

1. Identification
1.1. Product Identifier

Product Name HDCA

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

Recommended use 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
Carcinogenicity	Category 2
Flammable liquids	Category 3

2.2. Label Elements
EMERGENCY OVERVIEW

WARNING

Hazard statements
 May cause an allergic skin reaction
 Suspected of causing cancer
 Flammable liquid and vapor



Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

Appearance Paste	Physical State Liquid	Odor No information available
-------------------------	------------------------------	--------------------------------------

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see first aid measures on this label)
If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF ON SKIN (or hair):
Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use CO₂, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Not applicable

Unknown acute toxicity

71 % 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

Mixture

3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Quartz	14808-60-7	30 - 60
Limestone	1317-65-3	10 - 30
Naphtha, petroleum, hydrotreated heavy, <0.1% Benzene	64742-48-9	1 - 5
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	1 - 5
N-(trichloromethylthio)phthalimide	133-07-3	0.1 - 1

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

Section 4: FIRST AID MEASURES

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

4.1. Description of first aid measures

General advice	Immediate medical attention is required.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
Inhalation	Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Ingestion	Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician or poison control center immediately. Drink plenty of water.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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 by skin contact. 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

5.1. Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or regular foam. Use water spray or fog; do not use straight streams. Water spray, fog or regular foam.

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Runoff to sewer may create fire or explosion hazard. Product is or contains a sensitizer. May cause sensitization by skin contact. Flammable.

Explosion Data

Sensitivity to mechanical impact

None.

Sensitivity to static discharge

May be ignited by friction, heat, sparks or flames.

5.3. Advice for firefighters

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Remove all sources of ignition.

Other information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of spill for later disposal.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal. Soak up with inert absorbent material.

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 Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials None known based on information supplied.

7.3. Specific end use(s)

Specific Use(s)
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

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

8.1. Control parameters

Exposure Guidelines

. This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	TWA: 0.1 mg/m ³
Limestone 1317-65-3	-	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ STEL: 20 mg/m ³
N-(trichloromethylthio)phthalimide 133-07-3	TWA: 1 mg/m ³ inhalable particulate matter	-	-	-

Chemical Name	Argentina	Brazil	Chile	Venezuela
Quartz 14808-60-7	TWA: 0.05 mg/m ³	-	TWA: 0.08 mg/m ³	TWA: 0.025 mg/m ³
Limestone 1317-65-3	TWA: 10 mg/m ³	-	TWA: 7 mg/m ³	-

8.2. Exposure controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Personal protective equipment [PPE]

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

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

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Paste
Color	Green
Odor	No information available
Odor Threshold	No information available

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

<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	150 °C / 302 °F	
Flash Point	57 °C / 135 °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	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
9.2. Other information		
Softening Point	No information available	
Molecular Weight	No information available	
Solvent content (%)	No information available	
Solid content (%)	93.1	
Density	1.830 g/cm ³	
VOC (volatile organic compound)		35 g/L / 2.0 %

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

Heat, flames and sparks. Protect from moisture.

10.5. Incompatible materials

None known based on information supplied.

10.6. Hazardous decomposition products

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

None known based on information supplied.

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	May cause sensitization by skin contact.
Ingestion	No data available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Quartz 14808-60-7	>20000 mg/kg	-	-
Limestone 1317-65-3	>5000 mg/kg (rat)	-	-
Naphtha, petroleum, hydrotreated heavy, <0.1% Benzene 64742-48-9	> 6000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	LC50 Vapour (4h) >5020 mg/m ³ (Rat)
Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate 88917-22-0	=1750 mg/Kg (Rat)	>2000 mg/Kg (Rat)	-
N-(trichloromethylthio)phthalimide 133-07-3	= 2636 mg/kg (Rat)	> 22600 mg/kg (Rabbit) > 5000 mg/kg (Rat)	> 0.48 g/m ³ (Rat) 4 h > 5 g/m ³ (Rat) 2 h

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

Symptoms	No information available.
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Irritation	No information available.
Corrosivity	No information available.
Sensitization	May cause sensitization by skin contact.
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	Central nervous system, Eyes, Kidney, Lungs, Respiratory system, Skin.
Aspiration hazard	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. As Quartz (14808-60-7) 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
Quartz 14808-60-7	A2	Group 1	Known	X
N-(trichloromethylthio)phthalimide 133-07-3	A3	-	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Confirmed animal carcinogen with unknown relevance to humans
IARC (International Agency for Research on Cancer)

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
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
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus)	CL50 (96h)>10000mg/L Fish (Oncorhynchus mykiss)		CE50 (48h) >1000 mg/L Daphnia Magna
Naphtha, petroleum, hydrotreated heavy, <0.1% Benzene 64742-48-9	EL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata) OECD 201	LC50: =2200mg/L (96h, Pimephales promelas)		LL50 (48h) > 1000 mg/l (Daphnia magna) OECD 202
Propanol, 1(or 2)-(2-methoxymethylethoxy)- , acetate 88917-22-0	LC50 (72h)>100 mg/L Green algae (pseudokirchneriella subcapitata)	LC50 (96h) >100 mg/L Fish (Pimephales promelas)		LC50 (48h)>100 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

Note:

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments made in non-bulk packages (see regulatory definition)
The information shown here, may not always agree with the bill of lading shipping description for the material

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

49 CFR 173.150(f)(2) "The requirements in this subchapter do not apply to a material classed as a combustible liquid in a non-bulk packaging unless the combustible liquid is a hazardous substance, a hazardous waste, or a marine pollutant."

DOT

UN/ID No NA1993
Proper Shipping Name Combustible liquid, n.o.s.
Hazard Class Combustible liquid
Packing Group III
Special Provisions IB3, T1, TP1, 148
Description NA1993, Combustible liquid, n.o.s. (Naphtha, petroleum, hydrotreated heavy, <0.1% Benzene), Combustible liquid, III
Emergency Response Guide Number 128

IATA

UN Number UN1133
Proper Shipping Name Adhesives
Transport hazard class(es) 3
Packing Group III
ERG Code 3L
Special Provisions A3
Description UN1133, Adhesives, 3, III

IMDG

UN Number UN1133
UN proper shipping name Adhesives
Transport hazard class(es) 3
Packing Group III
EmS-No. F-E, S-D
Special Provisions 223, 955
Description UN1133, Adhesives, 3, III, (57°C c.c.)

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 Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

Safety Data Sheet

HDCA
Revision Number 2

Revision Date 12-Dec-2018
Supersedes Date: 03-Nov-2016

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	12-Dec-2018
Revision note	SDS sections updated, 1, 3, 5, 8, 11, 12, 14, 15, 16.
Training Advice	No information available
Further 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 a 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