

SAFETY DATA SHEET



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www.keypolymer.com

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Revision Number 4

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Name KEY PC2021B/ PC2022B

Other means of identification

Product Code(s) PC2021B/ PC2022B

Product Technology Epoxy B side

Document Tough-Seal 21B, Tough-Seal 22B

None

Curing chemical. FOR INDUSTRIAL USE ONLY.

Restrictions on use: Do not use this product for any use other than intended

Manufacturer Address Key Polymer Holdings, LLC 17 Shepard Street

Lawrence, MA 01843, USA

Company Phone Number 978-683-9411 (8AM - 5PM EST) (M-F)

Emergency Telephone Chemtrec 1-800-424-9300 (24 Hours) CCN 12410

2. Hazards Identification

Classification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4

Emergency Overview

WARNING

Hazard statements
Harmful if swallowed
Harmful in contact with skin



Appearance Opaque Black

Physical state Liquid

Odor None

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Wear protective gloves, protective clothing, eye protection, face protection

Precautionary Statements - Response

Get medical advice/attention if you feel unwell IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents & container in accordance with local, state & federal regulations

Hazards Not Otherwise Classified (HNOC)

Other Information

Causes mild skin irritation

3. Composition/Information on Ingredients

Substance

Chemical Family Epoxy B Side

Chemical name	CAS No.	Weight-%	Trade secret
Calcium carbonate	1317-65-3	20 - 40	*
Proprietary amine curing agent	Proprietary	5 - 10	*
Carbon Black	1333-86-4	0.1 - 2	*
Silicon dioxide	14808-60-7	0.1 - 0.5	*

Calcium carbonate, when encapsulated in a polymer, is not expected to pose a respirable health hazard when processed under normal conditions of use.

4. First Aid Measures

Description of first aid measures

General advice Use first aid treatment according to the nature of the injury. For further assistance, contact

your local Poison Control Center. In case of accident or unwellness, seek medical advice

immediately (show directions for use or safety data sheet if possible).

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call

a physician if irritation persists.

^{*} The exact percentage (concentration) of composition may have been withheld as a trade secret.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. If symptoms persist, call a physician. Wash contaminated clothing

before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. If breathing is irregular or stopped, administer artificial respiration. Administer

oxygen if breathing is difficult. If symptoms persist, call a physician.

Ingestion IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting. Call a physician or Poison

Control Center immediately.

Self-protection of the first aider First Aider: Pay attention to self-protection. Ensure that medical personnel are aware of the

material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms N/A.

Indication of any immediate medical attention and special treatment needed

5. Fire-Fighting Measures

Suitable Extinguishing Media

Foam, Dry Chemical, Carbon Dioxide (CO2).

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water ways. Dike for water control.

Hazardous combustion products

Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Other Information Use personal protective equipment as required.

For Emergency Responders

Use personal protective equipment as required.

Environmental precautions

Environmental precautionsDo not allow into any sewer, on the ground or into any body of water. See Section 12 for

additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Acids, Bases, Strong oxidizing agents, Product slowly corrodes copper, aluminum, zinc and

galvanized surfaces.

8. Exposure Controls/Personal Protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust
1017 00 0		fraction	1 vvv. o mg/m Tespirable dust
		(vacated) TWA: 15 mg/m³ total	
		dust	
		(vacated) TWA: 5 mg/m³ respirable fraction	
Carbon Black	TWA: 3 mg/m ³ inhalable	TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³
1333-86-4	particulate matter	(vacated) TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³
			TWA: 0.1 mg/m³ Carbon black in
			presence of Polycyclic aromatic
			hydrocarbons PAH
Silicon dioxide	TWA: 0.025 mg/m³ respirable	TWA: 50 μg/m ³	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	TWA: 50 µg/m³ excludes	TWA: 0.05 mg/m³ respirable
		construction work, agricultural	dust
		operations, and exposures that	
		result from the processing of sorptive clays	
		(vacated) TWA: 0.1 mg/m ³	
		respirable dust	
		: (250)/(%SiO2 + 5) mppcf	
		TWA respirable fraction	
		: (10)/(%SiO2 + 2) mg/m ³ TWA	
		respirable fraction	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Splash Goggles. Avoid contact with eyes.

None

N/A

Skin and body protection Wear protective gloves and protective clothing.

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

Odor

Odor threshold

Setaflash Closed Tester

provided in accordance with current local regulations.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical stateLiquidAppearanceOpaqueColorBlack

Property Values Remarks • Method

pH N/A
Melting point / freezing point N/A
Boiling point / boiling range > 100 °C
Flash point 133 °C
Evaporation rate N/A

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit: N/A
Lower flammability limit: N/A
Vapor pressure N/A
Vapor density N/A
Relative density 1.285

Water solubility Slightly soluble

Solubility in other solvents N/A Partition coefficient N/A **Autoignition temperature** N/A **Decomposition temperature** N/A Kinematic viscosity N/A Dynamic viscosity N/A **Explosive properties** N/A **Oxidizing properties** N/A

Other Information

Softening point N/A Molecular weight N/A VOC Content (%) N/A

Liquid Density 10.7 pounds/gallon

Bulk density N/A

10. Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Keep out of reach of children. Avoid moisture. Incompatible materials.

Incompatible materials

Acids, Bases, Strong oxidizing agents, Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Hazardous decomposition products

Carbon oxides, Nitrogen oxides (NOx), Nitric acid, Ammonia, May emit toxic fumes under fire conditions.

11. Toxicological Information

Information on likely routes of exposure

Product Information The product has not been tested.

Inhalation Remove to fresh air. Inhalation of vapors in high concentration may cause irritation of

respiratory system.

Eye contact Avoid contact with eyes. Contact with eyes may cause irritation.

Skin contact Avoid contact with skin. Irritating to skin.

Ingestion Do NOT taste or swallow. Not an expected route of exposure. Harmful if swallowed.

Component Information Caution - This preparation contains a substance not yet fully tested

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Proprietary amine curing agent	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-
Carbon Black 1333-86-4	> 15400 mg/kg(Rat)	-	> 4.6 mg/m³ (Rat) 4 h

Information on toxicological effects

N/A.

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

Skin corrosion/irritationRepeated or prolonged contact may cause skin irritation and dermatitis. **Irritation**May cause irritation of respiratory tract. May cause skin and eye irritation.

Sensitization N/A.
Germ cell mutagenicity N/A.

Carcinogenicity

Silicon Dioxide (CAS 14808-60-7) is a naturally occurring substance that poses low
respirable carcinogen risk when encapsulated in a polymeric liquid. If sanding or grind

respirable carcinogen risk when encapsulated in a polymeric liquid. If sanding or grinding finished product, wear appropriate personal protective equipment for respirable dust hazards. Carbon Black (CAS 1333-86-4) poses extremely low respirable carcinogenic risk when encapsulated in a polymeric liquid. If sanding or grinding cured product, wear

appropriate personal protective equipment for respirable dust hazards.

appropriate personal protective equipment for respirable dust nazaras.				
Chemical name	ACGIH	IARC	NTP	OSHA
Carbon Black 1333-86-4	A3	Group 2B		X
Silicon dioxide 14808-60-7	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

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

X - Present

Reproductive toxicity N/A. STOT - single exposure N/A.

STOT - repeated exposure N/A.
Aspiration hazard N/A.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,835.00 mg/kg mg/l

12. Ecological Information

Ecotoxicity

Harmful to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

N/A

Other adverse effects

N/A

Ozone depletion potential (ODP) N/A

13. Disposal Considerations

Waste treatment methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. Transport Information

DOT Not regulated

Proper shipping name Non-Regulated Adhesive, class 60

ICAO (air)Not regulatedIATANot regulated

<u>IMDG</u> Not regulated

15. Regulatory Information

International Inventories

TSCA All components of this product are either exempt or included on the TSCA Inventory in

compliance with the Toxic Substances Control Act.

IECSC All components are listed or exempted.
AICS All components are listed or exempted.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

The following chemicals may be contained in this product in de minimis amounts not required for listing in section 3. However, these chemicals do appear on some state Right-to-Know (RTK) and/or other hazardous substance lists. Please check your state's listings for more information.

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65	
Carbon Black - 1333-86-4	Carcinogen	
Silicon dioxide - 14808-60-7	Carcinogen	
Methanol - 67-56-1	Developmental	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Calcium carbonate 1317-65-3	X	X	X
Carbon Black 1333-86-4	X	X	Х
Silicon dioxide 14808-60-7	X	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other Information

Prepared By Key Polymer Corp Compliance

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Revision Note

N/A

Disclaimer

The information provided in this Material 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