SAFETY DATA SHEET

Date Prepared : 06/10/2016
SDS No : SCC-209HBA

RestoKrete Filler Compound No. 209HB (High-Build), Part A, Hardener

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RestoKrete Filler Compound No. 209HB (High-Build), Part A, Hardener
PRODUCT CODE: 209HBLA
CHEMICAL FAMILY: Modified Cylcoaliphatic Polyamine

MANUFACTURER

Sauereisen
160 Gamma Drive
Pittsburgh, PA 15238
Emergency Contact: John Kozak
Emergency Phone: (800)424-9300
Alternate Contact: Don Schubert
Customer Service: 412 963-0303
E-Mail: jakozak@sauereisen.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical):1-800-222-1222
CHEMTREC (US Transportation): 1-800-424-9300
CHEMTREC (Outside US):1-703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1C
Acute Toxicity (Inhalation), Category 4
Eye Irritation, Category 2A
Respiratory Tract Irritation, Category 3
Respiratory Sensitization, Category 1B

Environmental:

Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL

Corrosion

Exclamation mark

Health hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H302: Harmful if swallowed.
H332: Harmful if inhaled.
H317: May cause an allergic skin reaction.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H412: Harmful to aquatic life with long lasting effects.
H314: Causes severe skin burns and eye damage.
H319: Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P310: Immediately call a POISON CENTER/doctor/...
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P320: Specific treatment is urgent (see ... on this label).
P363: Wash contaminated clothing before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER/doctor/...if you feel unwell.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

Storage:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash ... thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P271: Use only outdoors or in a well-ventilated area.
P270: Do not eat, drink or smoke when using this product.
P337+P313: If eye irritation persists: Get medical advice/attention.
P285: In case of inadequate ventilation wear respiratory protection.
P405: Store locked up.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501: Dispose of contents/container to ...

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Benzyl Alcohol	< 40	100-51-6
cyclohexanamine, 4,4'-methylenebis-	< 5	1761-71-3
2,4,6-tris(dimethylaminomethyl)phenol	< 5	90-72-2
formaldehyde, polymer with benzenamine, hydrogenated	> 40	135108-88-2
2-piperazin-1-ylethylamine	< 15	140-31-8

4. FIRST AID MEASURES

EYES: Remove contact lenses if present. Hold eyelids apart, initiate and maintain gentle and continuous irrigation until patient receives medical care. If prompt medical care is not available, continue irrigation for one hour. Rinse under eyelids with plenty of water for at least 20 minutes.

SKIN: Immediately remove contaminated clothing and flush skin with water for at least 20 minutes. Cover any wound with a sterile dressing. Seek immediate medical attention.

INGESTION: Do not induce vomiting - vomiting will cause further damage to the throat. Dilute by giving water or milk to drink if victim is conscious. Seek immediate medical attention.

INHALATION: If difficulty breathing, move to fresh at air once. For acute overexposure, give oxygen if breathing is difficult. Apply artificial respiration if breathing has stopped. Keep patient warm and at rest. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Product vapor in low concentration can cause lacrimation, conjunctivits and corneal Edema when absorbed into the eye tissue. Corneal edema may give rise to a perception of a blue haze or fog around lights. The effect is transient.

SKIN: Severe skin irritant, and sensitizer. Conctact causes severe irritation and pain, may cause burns and permanent injury.

INHALATION: Inhalation of vapors may cause irritation, coughing or chest pain.

ACUTE EFFECTS: Will cause burns to skin and eyes. High concentration of vapors can cause severe irritation of eyes and respiratory tract. Liquid causes severe damage to mucous membranes if swallowed.

CHRONIC EFFECTS:

Repeated and/or prolonged contact with the skin may cause allergic reaction or sensitization. Repeated and/or prolonged exposures may result in adverse respiratory effects (such as cough, tightness of chest, or shortness of breath); adverse skin effects (such as defatting, rash, irritation or corrosion); adverse eye effects (such as conjunctivitis or corneal damage).

Kidney , liver, skin and eye disorders are generally aggravated by exposure.

NOTES TO PHYSICIAN: Further treatment may be necessary. Contact local poison control center. Rinse mouth.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Do not use water, which may spread fire. Extinguish with foam, dry chemical, carbon dioxide, earth or sand.

HAZARDOUS COMBUSTION PRODUCTS: May generate ammonia and toxic nitrogen oxide gasses. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated.

OTHER CONSIDERATIONS: If burned without sufficient oxygen, emits dense smoke

EXPLOSION HAZARDS: Dusts and aerosols at sufficient concentrations may exhibit explosive characteristics if ignited by static discharge or spark. Exercise care during dusting or misting operations such as grinding or drilling.

FIRE FIGHTING PROCEDURES: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

FIRE FIGHTING EQUIPMENT: Toxic fumes will be evolved when this material is involved in a fire. Self-contained breathing apparatus should be availible for fire fighters.

FIRE EXPLOSION: Containers may explode in heat of fire; cool containers with water.

SENSITIVE TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide, nitrogen oxides, and/or ammonia.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Avoid contact with material. Persons not wearing appropriate protective equipment should be excluded from the area of spill until clean-up is complete. Stop spill at source. Dike area to prevent spreading. Remaining product may be taken up by clay, diatomaceous earth or other absorbent and shoveled into disposal containers such as a dumpster or other common garbage receptacle. Residual material may be removed using steam or hot soapy water. Keep spark-producing equipment away from area. Observe environmental regulations and report spills as required to appropriate authorities.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:

Avoid contact with eyes, skin, and clothing.
For industrial use only!
Harmful if inhaled.
Do not take internally.
May cause irritation.
Do not eat, drink or smoke when using this product.
Wear chemical splash goggles, gloves and protective clothing.
Avoid high ambient temperatures and humidity.
Wash thoroughly after handling.

STORAGE: Store in a cool, dry place.
Keep container closed when not in use.
Store away from direct heat and flame.

Keep away from food and drinking water.
Store out of direct sunlight.
DO NOT SMOKE where product is used or stored.
Store in a well-ventilated place.
Do not store in reactive metal containers.
Do not store near acids.
Always mix well before using.

SPECIAL SENSITIVITY: DO NOT USE sodium nitrate or other nitrosating agents in formulations containing this product. Suspected carcinogen nitrosamines could be formed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
	EXPOSURE LIMITS			
Chemical Name	**Type**		**ppm**	**mg/m³**
Benzyl Alcohol	**ACGIH TLV**	**TWA**	10	

ENGINEERING CONTROLS: Breathing vapors must be avoided. Ventilation must be sufficient to control vapors. This material should be confined as far as possible within sealed or covered equipment in which case normal ventilation should be adequate. Special (local) ventilation will be needed in areas where vapors are expected to be vented.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Splashproof, chemical resistant safety goggles or face shield. Eye bath nearby. Contact lenses should not be worn.

SKIN: Impervious gloves, neoprene, or other suitable long sleeved and legged clothing. Launder clothing before reuse.

RESPIRATORY: Use organic vapor cartidges in respirators. If TLV of any component is exceeded use appropriate respiratory protection or ventilate in accordance with OSHA Regulation 29 CFR Part 1910.V.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Safety shower and eyewash station should be within direct access. Keep containers closed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)
Benzyl Alcohol	200

ODOR: Ammonia

APPEARANCE: Liquid

COLOR: Yellowish.

pH: Alkaline.

PERCENT VOLATILE: 0

FLAMMABLE LIMITS: 0 to 0

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

SPECIFIC GRAVITY: 1 to 1.1

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under normal conditions of use and storage.

CONDITIONS TO AVOID: Do not store in iron, zinc, galvanized or other reactive metal containers.

POSSIBILITY OF HAZARDOUS REACTIONS: CAUTION! N-Nitrosamines, many of which are known potent carcinogens, may be

formed if exposed to nitrous acid, nitrites, or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc, iron, and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxides, possibly creating an explosion. Reactive with hydroxyl xompounds, nitrites, nitrosating agents. Vigorous reaction accompanied by large heat release when mixed with acids. Generated heat may cause vigorous boiling.

HAZARDOUS DECOMPOSITION PRODUCTS: Nitric Acid. Ammonia. Nitrogen oxides. Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide. Aldehydes. Flammable hydrocarbon fragments (i.e. acetylene.) Nitrosamine.

INCOMPATIBLE MATERIALS: (Materials to avoid) mineral acids, organic acids, oxidizing agents, and reactive metals.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD_{50}	DERMAL LD_{50}	INHALATION LC_{50}
Benzyl Alcohol	1230	2000	1000

DERMAL LD_{50}: No data is available on the product itself.

Notes: Components:
Benzyl Alcohol: LD50 (rabbit) 2000 mg/kg
1-(2-Aminoethyl)piperazine LD50 (rabbit) 880 mg/kg
4,4'-Methylenebiscyclohexanamine LD50 (rabbit) 2110 mg/kg
Formaldehyde, polymer with benzenamine, hydrogenated LD50 (rabbit) >1000 mg/kg

ORAL LD_{50}: > 500 mg/kg (rat)

Notes: Components:
Benzyl Alcohol: LD50, rat: 1,230 - 3,100 mg/kg

INHALATION LC_{50}: No data is available on the product itself.

Notes: Components:
Benzyl Alcohol: LD50, rat (4 hours): >4.178 mg/L

SERIOUS EYE DAMAGE/IRRITATION: Eye, Skin and Inhallation Irritant.

RESPIRATORY OR SKIN SENSITISATION: Skin and Respiratory sensitizer.

GERM CELL MUTAGENICITY: No Data Available

CARCINOGENICITY

NOTES: Does not contain any substances greater than 0.1% listed by IARC (Internationa Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACGIH (American Conference for Governmental Industrial Hygienists) or EU (European Union)

REPRODUCTIVE TOXICITY: No Data Available

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available. Contact Env. Dept.

BIOACCUMULATION/ACCUMULATION: No Data available on the product itself.

Components: some components are classified as persistent, bioaccumulative, or toxic.

Consult www.pbtprofiler.net

AQUATIC TOXICITY (ACUTE): No data is available on the product itself.

Notes: Components:
Benzyl Alcohol, bluegill sunfish (96 hour): LC50: 10 mg/L
Benzyl Alcohol, fathead minnow (96 hour): LC50: 460 mg/L
Benzyl Alcohol, silverside minnow (96 hour): LC50: 10 - 32 mg/L
Benzyl Alcohol, water flea (48 hour): LC50: 360 mg/L

4,4'-Methylenebiscyclohexanamine, golden orfe (96 hour): LC50: 46-100 mg/L
4,4'-Methylenebiscyclohexanamine, daphnia magna (48 hour): EC50: 6.84 mg/L

4,4'-Methylenebiscyclohexanamine, algae (72 hour): EC50: 140-200 mg/L

CHEMICAL FATE INFORMATION: Phenol (108-95-2) Biodegradability = 99.5% at 7 days

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Material should be disposed of as hazardous waste in accordance with Federal, state and local environmental regulations. Dispose of containers with any amount of liquid material as hazardous waste. Part B mixed containers can be considerd as non-hazardous provided all residual material is cured solid. Part A and part D containers can be washed out with a small amount of laquer thinner. The residual material should be collected in one large container and disposed of as hazardous waste. The waste material can also be mixed with an epoxy resin and cured to a solid state for disposal as non-hazardous waste. Consult Sauereisen for the appropriate amount of epoxy resin to add to a known amount of part A (epoxy resin hardener).

EMPTY CONTAINER: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Amines, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine/Triethylenetetramine/Tetraethylenepentamine)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN2735

PACKING GROUP: III

LABEL: Corrosive

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Amines, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN NUMBER: UN2735

HAZARD CLASS: 8

PACKING GROUP: III

LABEL: Corrosive.

AIR (ICAO/IATA)

SHIPPING NAME: Amines, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Amines, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

LABEL: Corrosive

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Amines, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

LABEL: Corrosive

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

Corrosive

Toxic

R20/22: Harmful by inhalation and if swallowed.
R34: Causes burns.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42/43: May cause sensitization by inhalation and skin contact.
S24/25: Avoid contact with skin and eyes.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute. Chronic. Irritant. Toxic.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Phenol * 108-95-2 * 20% Max weight.

TITLE III NOTES: None above detection limits.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Benzyl Alcohol	100-51-6
cyclohexanamine, 4,4'-methylenebis-	1761-71-3
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2
formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2
2-piperazin-1-ylethylamine	140-31-8

TSCA STATUS: Components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION

Toxic

Corrosive

R20/22: Harmful by inhalation and if swallowed.
R34: Causes burns.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42/43: May cause sensitization by inhalation and skin contact.
S24/25: Avoid contact with skin and eyes.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.

WHMIS CLASS: Class D, Division 2, Subdivision B: Materials cause other toxic effects, toxic material. Class E, Corrosive.

DOMESTIC SUBSTANCE LIST (INVENTORY): Data not available.

16. OTHER INFORMATION

PREPARED BY: John A Kozak **Date Prepared:** 06/10/2016

HMIS RATING

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F