

SAFETY DATA SHEET

B12

Supplier Details

Manufacturer Name	The Berkebile Oil Company
Address	1216 Red Brant Road Somerset, PA 15501
Phone	814-443-1656
Email	info@berkebileoil.com
Fax	814-443-2873
Chemtrec Emergency Tel #	800-424-9300

Product name Code

B12

4 Minute Epoxy Steel 2 oz.

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms

Signal word

Warning!

Hazard statements

Causes skin and eye irritation.
May cause an allergic skin reaction.

Precautionary statements

Prevention

Wear protective gloves. Wear eye or face protection. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

Not applicable.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

None known.

Substance/mixture

Mixture

Ingredient name	% by weight	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin crystalline silica	10 - 30	25068-38-6
non-respirable	0.1 - 1	14808-60-7

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

Description of necessary first aid measures**Inhalation****Skin contact****Eye contact****Ingestion**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed**Potential acute health effects**

Inhalation No known significant effects or critical hazards.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Ingestion

Causes serious eye irritation.

Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Inhalation No specific data.

Skin contact

Adverse symptoms may include the following: irritation
redness

Eye contact

Adverse symptoms may include the following:
pain or irritation
watering
redness

Ingestion

No specific data.

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

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

See toxicological information (Section 11)

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire. None known.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

National Fire Protection Association (U.S.A.)

Health

0 **Flammability**

2 0 **Instability/Reactivity Special**

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide
carbon monoxide sulfur oxides
halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Control parameters

Occupational exposure limits

Ingredient name	CAS #	Exposure limits
crystalline silica non-respirable	14808-60-7	OSHA PEL Z3 (United States, 9/2005). Notes: 250/(%SiO₂+5) TWA: 250 MPPCF / (%SiO ₂ +5) 8 hours. Form: Respirable OSHA PEL Z3 (United States, 9/2005). Notes: 10/(SiO₂+2) TWA: 10 MG/M ³ / (%SiO ₂ +2) 8 hours. Form: Respirable ACGIH TLV (United States, 3/2012). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 1/2013). TWA: 0.05 mg/m ³ 10 hours. Form: respirable dust OSHA PEL Z3 (United States, 9/2005). Notes: 30/(%SiO₂+2) TWA: 30 MG/M ³ / (%SiO ₂ +2) 8 hours. Form: Total dust.

Appropriate engineering controls

Environmental exposure controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of

environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Respiratory protection

Skin protection Hand protection

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Physical state Color

Odor

Odor threshold pH

Melting point

Solid.

Gray.-Black. Pungent. Sulfurous. Not available.

Not applicable. Not available.

Boiling point

Not available.

Flash point

[Product does not sustain combustion.]

Evaporation rate

Not available.

Flammability (solid, gas)

Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Lower and upper explosive (flammable) limits

Vapor pressure Vapor density Relative density Solubility

Not available.

Not available. Not available. 2.247

Easily soluble in the following materials: methanol and acetone. Insoluble in the following materials: cold water and hot water.

Solubility in water Not available.

Auto-ignition temperature

Not available.

Decomposition temperature >200°C (>392°F)

Viscosity Not available.

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

No specific data.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Information on toxicological effects

Acute toxicity

No specific data.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol-A-	Eyes - Mild irritant	Rabbit	-	100	-
(epichlorhydrin); epoxy resin				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				microliters	
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
				milligrams	

Sensitization

No specific data.

Mutagenicity

No specific data.

Carcinogenicity

No specific data.

Conclusion/Summary

: This product contains talc in a polymer matrix. Sanding the cured product may release particles containing talc with the polymer and other components of the matrix into the air. The talc contains less than 1% crystalline silica. Appropriate evaluations of the use of the product should be performed to determine if exposure to talc occurs due to handling and use. If such exposures occur, appropriate precautions must be taken to prevent

exposure in excess of the OSHA Permissible Exposure Limit (PEL).

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica non-respirable	-	1	Known to be a human carcinogen.

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

No specific data.

Specific target organ toxicity (repeated exposure)

No specific data.

Aspiration hazard

No specific data.

Information on the likely routes of exposure

Potential acute health effects Eye contact

Not available.

Causes serious eye irritation.

Inhalation

No known significant effects or critical hazards.

Skin contact

Causes skin irritation. May cause an allergic skin reaction.

Ingestion

Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation

No specific data.

Skin contact

Ingestion

Adverse symptoms may include the following: irritation
redness

No specific data.

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

Short term exposure

Potential immediate effects

Not available.

Potential delayed effects

Not available.

Long term exposure

Potential immediate effects

Not available.

Potential delayed effects

Not available.

Potential chronic health effects

No specific data.

General

Carcinogenicity Mutagenicity Teratogenicity

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

No known significant effects or critical hazards. No known significant effects or critical hazards. 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

No specific data.

Toxicity

No specific data.

Persistence and degradability

No specific data.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	2.64 to 3.78	31	low

Mobility in soil

Soil/water partition coefficient (K_{oc})

Not available.

Other adverse effects

No known significant effects or critical hazards.

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification Not available.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.

UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-

Section 14. Transport information

Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

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.

U.S. Federal regulations

TSCA 8(a) PAIR: Siloxanes and Silicones, di-Me, reaction products with silica

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances

Clean Air Act Section 602 Class II Substances

SARA 302/304

Not listed

Not listed Not listed

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - 30	No.	No.	No.	Yes.	No.
crystalline silica non-respirable	0.1 - 1	No.	No.	No.	No.	Yes.

State regulations Massachusetts

The following components are listed: SOAPSTONE; MINERAL WOOL FIBER
New York None of the components are listed.

New Jersey

The following components are listed: SOAPSTONE; SILICA, QUARTZ; QUARTZ (SiO₂); FERROSILICON; FERROCERIUM

Pennsylvania

The following components are listed: SOAPSTONE DUST; QUARTZ (SiO₂)

Minnesota Hazardous Substances**California Prop. 65**

None of the components are listed.

WARNING: This product contains a chemical known to the State of California to cause cancer.

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Section 15. Regulatory information

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Talc, not containing asbestiform fibres crystalline silica non-respirable	Yes. Yes.	No.	No.	No.
carbon black respirable	Yes.	No.	No.	No.

Canada inventory

All components are listed or exempted.

International regulations**International lists**

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): Not determined.

Japan inventory: Not determined.

Korea inventory: All components are listed or exempted.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Substances of very high concern

None of the components are listed.

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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References

Not available.

Indicates information that has changed from previously issued version.

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