Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Killark® Celox™ KQS Formula D Series Sealant (Part B Curing Agent)

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

314-678-7087

Killark Division, Hubbel Inc. 2112 Fenton Logistics Park Blvd Fenton, MO 63026

1.4. Emergency telephone number

Emergency number : 800-535-5053 (US/Canada); 352-323-3500(international) 24/7

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin Corr. 1C H314 Eye Dam. 1 H318 Skin Sens. 1 H317 Repr. 2 H361 STOT RE 2 H373

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)







Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure if swallowed

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection.

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P302+P352 - If on skin: Wash with plenty of water.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Mercaptan	Proprietary	45 – 70
phenol, 4-nonyl-, branched	(CAS-No.) 84852-15-3	10 – 30
2,4,6-Tri(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2	10 – 30
Urea, N,N'-bis[3-(dimethylamino)propyl]-	(CAS-No.) 52338-87-1	5 – 13
Cyclohexanamine, 4,4'-methylenebis-	(CAS-No.) 1761-71-3	5 – 13
Bis[(dimethylamino)methyl]phenol	(CAS-No.) 71074-89-0	1 – 5

^{*}In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the

doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an

unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial

respiration.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at

least 15 minutes. If irritation develops or persists, get medical attention immediately.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact

lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison

control center or medical professional. Get medical attention immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause

damage to organs through prolonged or repeated exposure. Suspected of damaging fertility.

Suspected of damaging the unborn child.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : May cause damage to organs through prolonged or repeated exposure if swallowed.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage

to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry powder. Water spray.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Do not dispose of fire-fighting water in the environment.

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Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ev

Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air

respirator, in case of emergency.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams. Prevent entry to sewers and public waters.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This

material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Keep container

closed when not in use. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before

eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use. Containers which are

opened should be properly resealed and kept upright to prevent leakage. Store in a dry, cool

and well-ventilated place.

Incompatible materials : No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Urea, N,N'-bis[3-(dime	thylamino)propyl]- (52338-87-1)			
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
phenol, 4-nonyl-, branched (84852-15-3)				
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
Cyclohexanamine, 4,4'-methylenebis- (1761-71-3)				
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)				
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
Bis[(dimethylamino)methyl]phenol (71074-89-0)				
ACGIH	Remark (ACGIH)	OELs not established		

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Bis[(dimethylamino)m	ethyl]phenol (71074-89-0)	
OSHA	Remark (OSHA)	OELs not established

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):







Personal protective equipment:

Gloves. Protective goggles. Wear chemically impervious apron over labcoat and full coverage clothing.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Be aware that the chemical may penetrate the gloves. Frequent changes are advisable. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection:

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Viscous liquid Appearance : White or light yellow Color Odor : No data available Odor threshold No data available : No data available рΗ Melting point No data available Freezing point : No data available : No data available Boiling point Flash point : No data available

Relative evaporation rate (butyl acetate=1) : < 1

Flammability (solid, gas) : No data available Vapor pressure : No data available Vapor pressure at 20 °C : 3 mm Hg Specfic gravity ($H_2O = 1$) : 1.08 @ 20°C Relative vapor density at 20 °C : No data available Relative density : No data available

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Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : Not applicable : No data available Viscosity, dynamic **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

VOC content : 0 g/L

Additional information : Volatiles (wt %): 0%

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Peroxides. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (innatation)	. Not classified
Urea, N,N'-bis[3-(dimethylamino)propyl]- (52338-87-1)
LD50 oral rat	≈ 5126 mg/kg body weight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	≈ 2050 mg/kg body weight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))
phenol, 4-nonyl-, branched (84852-15-3)	
LD50 oral rat	1300 mg/kg
LD50 dermal rabbit	2031 mg/kg
Cyclohexanamine, 4,4'-methylenebis- (176	61-71-3)
LD50 oral rat	1000 mg/kg (Source: IUCLID)
LD50 dermal rabbit	2110 mg/kg
LC50 Inhalation - Rat	400 mg/m³ mouse
2,4,6-Tri(dimethylaminomethyl)phenol (90-	-72-2)
LD50 oral rat	1000 mg/kg
LD50 dermal rat	1280 mg/kg
011	

 Skin corrosion/irritation
 : Causes severe skin burns.

 Serious eye damage/irritation
 : Causes serious eye damage.

 Respiratory or skin sensitization
 : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

Symptoms/effects : Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause

damage to organs through prolonged or repeated exposure. Suspected of damaging fertility.

Suspected of damaging the unborn child.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : May cause gastrointestinal irritation.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage

to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data available.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities.

No discharge to surface waters is allowed without an NPDES permit.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN2735 Amines, liquid, corrosive, n.o.s. (phenol, 4-nonyl-, branched; Cyclohexanamine, 4,4'-

methylenebis-), 8, III

UN-No.(DOT) : UN2735

Proper Shipping Name (DOT) : Amines, liquid, corrosive, n.o.s.

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 8 - Corrosive



DOT Quantity Limitations Passenger aircraft/rail : 0.5 L

(49 CFR 173.27)

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DOT Quantity Limitations Cargo aircraft only (49 : 2.5 L

CFR 175.75)

Dangerous for the environment : Yes
Marine pollutant : Yes

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Emergency Response Guide (ERG) Number : 153

Other information : No supplementary information available.

Transport by sea (IMDG)

Transport document description (IMDG) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (phenol, 4-nonyl-, branched;

Cyclohexanamine, 4,4'-methylenebis-), 8, III

UN-No. (IMDG) : 2735

Proper Shipping Name (IMDG) : AMINES, LIQUID, CORROSIVE, N.O.S.

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 0

Marine pollutant : Yes

Air transport (IATA)

Transport document description (IATA) : UN 2735 Amines, liquid, corrosive, n.o.s. (phenol, 4-nonyl-, branched; Cyclohexanamine, 4,4'-

methylenebis-), 8, III

UN-No. (IATA) : 2735

Proper Shipping Name (IATA) : Amines, liquid, corrosive, n.o.s.

Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Killark® Celox™ KQS Formula D Series Sealant (Part B Curing Agent	t)
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All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021 or are otherwise exempt, or regulated by other agencies such as FDA or FIFRA

SARA Section 311/312 Hazard Classes

Health hazard - Skin corrosion or Irritation
Health hazard - Serious eye damage or eye irritation
Health hazard - Respiratory or skin sensitization

Health hazard - Reproductive toxicity
Health hazard - Specific target organ toxicity (single or repeated exposure)

phenol, 4-nonyl-, branched (84852-15-3)

EPA TSCA Regulatory Flag SP - SP - indicates a substance that is identified in a proposed Significant New Use Rule.

15.2. International regulations

No additional information available

15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Other information : Author: JAD.

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NFPA health hazard : 3 - Materials that, under emergency conditions, can cause

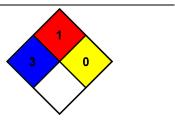
serious or permanent injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can

occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS Hazard Rating

Health : 3
Flammability : 1
Physical : 0

Indication of changes:

Revision 1.0: New SDS Created.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.