



SAFETY DATA SHEET

Surrounding You with Exceptional Protection

Issue Date 24-Feb-2016

Revision Date 21-Oct-2020

Version 1

1. IDENTIFICATION

Product identifier

Product Name PART B (Catalyst/Hardener for Blome Vinyl Ester Coatings and Lining Systems)

Other means of identification

Product Code 958BCC

UN/ID no UN3109

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Cumene hydroperoxide-based catalyst/hardener/curing agent for use in Blome vinyl ester coatings and lining systems, including: Primer 205, TL-220/220-S, TL-222-S, TL-280, TL-400/405, CP-300 and all versions and variations thereof.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address
BLOME INTERNATIONAL
1450 Hoff Industrial Drive
O'Fallon, MO 63366

Emergency telephone number

Company Phone Number 636-379-9119
Emergency Telephone CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-966-6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Organic peroxides	Type F

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
Causes severe skin burns and eye damage

May cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure
Heating may cause a fire



Appearance viscous

Physical state liquid

Odor Strong Aromatic

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
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep/Store away from clothing/ combustible materials
Keep only in original container

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Immediately call a POISON CENTER or doctor/physician
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed
Store away from other materials
Store at temperatures not exceeding 38 °C/ 100 °F. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Cumyl hydroperoxide *	80-15-9	60 - 100
Cumene *	98-82-8	3 - 7
Benzenemethanol, .alpha.,.alpha.-dimethyl- *	617-94-7	3 - 7
Acetophenone *	98-86-2	0.1 - 1

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
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. Seek immediate medical attention/advice.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
Ingestion	Immediate medical attention is required. Rinse mouth. Drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes skin and eye burns. May result in permanent damage including blindness. Coughing and/ or wheezing.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2, sand, earth, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Flammable. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO2).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

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. Burning produces heavy smoke. Avoid runoff to waterways and sewers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

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. 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. Dam up. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Store at temperatures not exceeding 38 °C/ 100 °F. Do not store near combustible materials.

Packaging materials Keep only in original container.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents. Amines. Metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines The American Industrial Hygiene Association's (AIHA) Documentation of the Workplace Environmental Exposure Limits (WEELs) (latest edition). Cumene hydroperoxide - 1 ppm.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cumene 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³
Acetophenone 98-86-2	TWA: 10 ppm	-	-

NIOSH IDLH *Immediately Dangerous to Life or Health*

Appropriate engineering controls

Engineering Controls
 Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

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 provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Strong Aromatic
Appearance	viscous	Odor threshold	No information available
Color	yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	79 °C / 174 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	1	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	>1	
Relative density	1.0303	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	82 C (180 F)	
Kinematic viscosity	> 25 mm ² /s	@ 40 °C
Dynamic viscosity	No information available	
Explosive properties	Not an explosive	
Oxidizing properties	May intensify fire; oxidizer	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions. SADT (self-accelerating decomposition temperature). 82 °C.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Amines. Metals.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritating to respiratory system. Harmful by inhalation.
Eye contact Corrosive to the eyes and may cause severe damage including blindness.
Skin contact Irritating to skin. May cause burns.
Ingestion Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Cumyl hydroperoxide 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	= 39000 mg/m ³ (Rat) 4 h > 3577 ppm (Rat) 6 h
Benzenemethanol, .alpha.,.alpha.-dimethyl- 617-94-7	= 1300 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 4300 mg/kg (Rabbit)	-
Acetophenone 98-86-2	= 815 mg/kg (Rat) = 900 mg/kg (Rat)	= 1760 mg/kg (Rabbit)	> 2.130 mg/L (Rat) 8 h

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes. May result in permanent damage including blindness. Causes skin burns. Coughing and/ or wheezing.

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

Sensitization Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Cumene 98-82-8	-	Group 2B	Reasonably Anticipated	X

*IARC (International Agency for Research on Cancer)
 Group 2B - Possibly Carcinogenic to Humans
 NTP (National Toxicology Program)
 Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present*

Reproductive toxicity Based on available data, the classification criteria are not met.
STOT - single exposure Respiratory system.
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Chronic toxicity Avoid repeated exposure.

Target Organ Effects Eyes, Respiratory system, Skin, Central nervous system.
Aspiration hazard Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 382.00 mg/kg
ATEmix (dermal) 1,100.00 mg/kg
ATEmix (inhalation-dust/mist) 0.50 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

12 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Cumyl hydroperoxide 80-15-9	-	3.9: 96 h Oncorhynchus mykiss mg/L LC50 static	7: 24 h Daphnia magna mg/L EC50
Cumene 98-82-8	2.6: 72 h Pseudokirchneriella subcapitata mg/L EC50	6.04 - 6.61: 96 h Pimephales promelas mg/L LC50 flow-through 5.1: 96 h Poecilia reticulata mg/L LC50 semi-static 2.7: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 4.8: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	7.9 - 14.1: 48 h Daphnia magna mg/L EC50 Static 0.6: 48 h Daphnia magna mg/L EC50
Acetophenone 98-86-2	-	162: 96 h Pimephales promelas mg/L LC50 flow-through 155: 96 h Pimephales promelas mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
Cumene 98-82-8	3.7
Acetophenone 98-86-2	1.7

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated packaging Do not reuse container.

US EPA Waste Number D003 D001 U004 U055 U096

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Cumyl hydroperoxide 80-15-9	-	-	-	U096
Cumene 98-82-8	-	-	-	U055
Acetophenone	U004	Included in waste stream:	-	U004

98-86-2		F039	
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Cumyl hydroperoxide 80-15-9	Toxic Ignitable
Cumene 98-82-8	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no UN3109
 Proper shipping name Organic peroxide type F, liquid
 Hazard Class 5.2
 Packing Group II
 Special Provisions IP5
 Description UN3109, Organic peroxide type F, liquid (Cumyl hydroperoxide, <90%), 5.2, II
 Emergency Response Guide Number 145

TDG

UN/ID no UN3109
 Proper shipping name Organic peroxide type F, liquid
 Hazard Class 5.2
 Packing Group II
 Description UN3109, Organic peroxide type F, liquid (Cumyl hydroperoxide ,<90%), 5.2, II

IATA

UN/ID no UN3109
 Proper shipping name Organic peroxide type F, liquid
 Hazard Class 5.2
 ERG Code 5L
 Special Provisions A20, A150, A802
 Description UN3109, Organic peroxide type F, liquid (Cumyl hydroperoxide, <90%), 5.2

IMDG

UN/ID no UN3109
 Proper shipping name Organic peroxide type F, liquid
 Hazard Class 5.2
 EmS-No F-J, S-R
 Special Provisions 122, 274
 Description UN3109, Organic peroxide type F, liquid (Cumyl hydroperoxide, <90%), 5.2

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDL Complies
 EINECS/ELINCS Complies
 IECSC Complies
 KECL Complies
 PICCS Complies
 AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Cumene - 98-82-8	1.0

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Cumyl hydroperoxide 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Cumene 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetophenone 98-86-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Cumyl hydroperoxide 80-15-9	X	X	X
Cumene 98-82-8	X	X	X
Acetophenone 98-86-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 3	Flammability 2	Instability 1	Physical and Chemical Properties -
HMIS	Health hazards 3*	Flammability 2	Physical hazards 1	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

Issue Date 24-Feb-2016

Revision Date 21-Oct-2020

Revision Note

No information available

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