

SAFETY DATA SHEET

DB5411 Black 218 Self Bond

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DB5411 Black 218 Self Bond

Section 1. Identification

GHS product identifier : DB5411 Black 218 Self Bond
Chemical name : Mixture
CAS number : Mixture
Other means of identification : FO20041916
Product type : liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : **POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation) : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. 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.

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

Classification of the substance or mixture : EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2

GHS label elements

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Hazard pictograms

Signal word
Hazard statements

- : Warning
- : Causes serious eye irritation.
- : May cause an allergic skin reaction.
- : Suspected of damaging fertility or the unborn child.

Precautionary statements
General
Prevention
Response
Storage
Disposal
Supplemental label elements
Hazards not otherwise classified

- : Not applicable.
- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. 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.
- : Store locked up.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- : None known.
- : None known.
- : Not available.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Chemical name** : Mixture
- Other means of identification** : FO20041916

CAS number/other identifiers

Ingredient name	%	CAS number
Bisphenol A - Epichlorohydrin polymer	3 - 5	25068-38-6

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2,4,4-Trimethyl-1,3-pentanediol diisobutyrate	1 - 3	6846-50-0
Calcium oxide	1 - 1.7	1305-78-8
Diethylenetriamine	1 - 1.6	111-40-0
Carbon black	0 - 0.3	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : 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.
- Inhalation** : 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 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : 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.

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- Ingestion** : 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. 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

- Eye contact** : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
- Inhalation** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under

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- Specific treatments** : medical surveillance for 48 hours.
: No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
Unsuitable extinguishing media : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : May emit Hydrogen Chloride (HCl).
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides
- Special protective actions 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.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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- For emergency responders** : If specialized 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** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage**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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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

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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.

Conditions for safe storage, including any incompatibilities

- : 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. Store in a well-ventilated place. 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.

Section 8. Exposure controls/personal protection
Control parameters
Occupational exposure limits

Ingredient name	Exposure limits
Bisphenol A - Epichlorohydrin polymer	None.
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate	None.
Calcium oxide	ACGIH TLV (1994-09-01) TWA 2 mg/m ³ NIOSH REL (1994-06-01) TWA 2 mg/m ³ OSHA PEL 1989 (1989-03-01) TWA 5 mg/m ³ OSHA PEL (1993-06-30) TWA 5 mg/m ³
Diethylenetriamine	ACGIH TLV (1994-09-01) Absorbed through skin. TWA 4.2 mg/m ³ 1 ppm NIOSH REL (1994-06-01) Absorbed through skin. TWA 4 mg/m ³ 1 ppm OSHA PEL 1989 (1989-03-01) TWA 4 mg/m ³ 1 ppm
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m ³

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	<p>OSHA PEL (1993-06-30) TWA 3.5 mg/m³</p> <p>NIOSH REL (1994-06-01) TWA 3.5 mg/m³</p> <p>NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m³</p> <p>ACGIH TLV (2010-12-06) TWA 3 mg/m³ Form: Inhalable fraction</p>
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Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : 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 : 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.

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.

Skin protection

Hand protection : 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,

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	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.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: liquid [liquid]
Color	: BLACK
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Not available.
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: Not available. Upper: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Dynamic: Not available. Kinematic: Not available.

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Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects
Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
Remarks - Dermal:	No applicable toxicity data			
Diethylenetriamine				
	LD50 Oral	Rat	1,080 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
	LD50 Dermal	Rabbit	1,090 mg/kg	-
Calcium oxide				
Remarks - Oral:	No applicable toxicity data			
Remarks - Inhalation:	No applicable toxicity data			
Remarks - Dermal:	No applicable toxicity data			
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate				
Remarks - Oral:	No applicable toxicity data			
Remarks - Inhalation:	No applicable toxicity data			
Remarks - Dermal:	No applicable toxicity data			
Bisphenol A - Epichlorohydrin polymer				
	LD50 Oral	Rat	11,400 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			

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Remarks - Dermal:	No applicable toxicity data
Conclusion/Summary	: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Diethylenetriamine	Skin - Moderate irritant	Rabbit			-
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate	Skin - Mild irritant	Human		504 hrs	-
	Skin - Mild irritant	Guinea pig			-
Bisphenol A - Epichlorohydrin polymer	Eyes - Mild irritant	Rabbit			-
	Eyes - Mild irritant	Rabbit			-
	Skin - Moderate irritant	Rabbit		24 hrs	-
	Skin - Severe irritant	Rabbit		24 hrs	-
	Eyes - Mild irritant	Rabbit			-

Conclusion/Summary

Skin : Mixture.Not fully tested.
Eyes : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Sensitization**Conclusion/Summary**

Skin : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Mutagenicity**Conclusion/Summary**

: Mixture.Not fully tested.

Carcinogenicity**Conclusion/Summary**

: Mixture.Not fully tested.

Classification

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Product/ingredient name	OSHA	IARC	NTP
Carbon black	-	2B	-

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Calcium oxide	Category 3	Not applicable	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness
Inhalation : Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations
Skin contact : Adverse symptoms may include the following: irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations
Ingestion : Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations

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

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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

Conclusion/Summary : Mixture. Not fully tested.
General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : Suspected of damaging the unborn child.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity
Acute toxicity estimates

Route	ATE value
Oral	103,736.6 mg/kg
Route	ATE value
Dermal	104,697.2 mg/kg

Section 12. Ecological information
Toxicity

Product/ingredient name	Result	Species	Exposure
Carbon black	No applicable toxicity data		
Remarks - Acute - Fish:	Acute EC50 37.563 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic	Acute		

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invertebrates.:			
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
Diethylenetriamine			
	Acute LC50 1,014 Mg/l Fresh water	Fish - Fish	96 h
Remarks - Acute - Fish:	Acute		
	Acute LC50 53.5 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
	Acute EC50 345.6 Mg/l Fresh water	Aquatic plants - Algae	96 h
Remarks - Acute - Aquatic plants:	Acute		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
Calcium oxide			
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic invertebrates.:	No applicable toxicity data		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
	Chronic NOEC 100 Mg/l Fresh water	Fish - Fish	46 d
Remarks - Chronic - Fish:	Chronic		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate			
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic invertebrates.:	No applicable toxicity data		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
Bisphenol A - Epichlorohydrin polymer			
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic	No applicable toxicity data		

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invertebrates.:	
Remarks - Acute - Aquatic plants:	No applicable toxicity data
Remarks - Chronic - Fish:	No applicable toxicity data
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Diethylenetriamine	-5.58	2.80	low
Calcium oxide	-	2.34	low
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate	-	5,340.00	high
Bisphenol A - Epichlorohydrin polymer	2.64 - 3.78	31.00	low

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

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

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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.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S.DOT 49CFR
Ground/Air/Water : Not regulated for transportation.

International Air
ICAO/IATA : Consult mode specific transport rules

International Water
IMO/IMDG : Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations :

- United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
- United States - TSCA 4(a) - Final Test Rules:** Not listed
- United States - TSCA 4(a) - ITC Priority list:** Not listed
- United States - TSCA 4(a) - Proposed test rules:** Not listed
- United States - TSCA 4(f) - Priority risk review:** Not listed
- United States - TSCA 5(a)2 - Final significant new use rules:** Not listed
- United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed
- United States - TSCA 5(e) - Substances consent order:** Not listed
- United States - TSCA 6 - Final risk management:** Not listed
- United States - TSCA 6 - Proposed risk management:** Not listed
- United States - TSCA 8(a) - Chemical risk rules:** Not listed
- United States - TSCA 8(a) - Dioxin/Furane precursor:** Not listed
- United States - TSCA 8(a) - Chemical Data Reporting (CDR):** Not determined
- United States - TSCA 8(a) - Preliminary assessment report (PAIR):** Not listed
- United States - TSCA 8(c) - Significant adverse reaction (SAR):**

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Not listed
United States - TSCA 8(d) - Health and safety studies: Not listed
United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Vinyl chloride monomer

United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Not listed
United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed
United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed
United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed
Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification : EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 TOXIC TO REPRODUCTION - Fertility - Category 2
 TOXIC TO REPRODUCTION - Unborn child - Category 2

Composition/information on ingredients

Name	%	Classification
Bisphenol A - Epichlorohydrin polymer	>= 3 - <= 5	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1
2,4,4-Trimethyl-1,3-pentanediol diisobutyrate	>= 1 - <= 3	TOXIC TO REPRODUCTION - Fertility - Category 2 TOXIC TO REPRODUCTION - Unborn child - Category 2

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Calcium oxide	$\geq 1 - \leq 1.7$	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Respiratory tract irritation - Category 3
Diethylenetriamine	$\geq 1 - \leq 1.6$	ACUTE TOXICITY - oral - Category 4 ACUTE TOXICITY - dermal - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
Carbon black	$> 0 - \leq 0.3$	CARCINOGENICITY - Category 2

Not applicable.

State regulations
Massachusetts

: None of the components are listed.

New York

: None of the components are listed.

New Jersey

: The following components are listed:

Ethene, chloro-, homopolymer

Calcium carbonate

Magnesium carbonate

Calcium oxide

Diethylenetriamine

Carbon black

Quartz

Pennsylvania

: The following components are listed:

Calcium carbonate

Calcium oxide

Diethylenetriamine

Carbon black

Quartz

California Prop. 65

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

Canada inventory : At least one component is not listed in DSL but all such components are listed in NDSL.

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International regulations
Inventory list

Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Europe inventory	:	Not determined.
Japan	:	Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Turkey	:	Not determined.
United States	:	All components are listed or exempted.

Section 16. Other information
Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

History

Date of printing	:	01/11/2020
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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

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IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations
: Not available.

References

Notice to reader

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