SAFETY DATA SHEET

1. Identification

Product identifier **CHO-BOND 1035**

Other means of identification

SDS number PHC-082

Product code 1035

Recommended use Moisture cure adhesive / sealant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Parker Hannifin Corp.

Address 77 Dragon Court
Woburn, MA 01888
United States

Telephone 781-935-4580

Website www.chomerics.com

E-mail chomailbox@parker.com

Emergency phone number INFOTRAC - Domestic 800-535-5053
INFOTRAC - International 352-323-3500

Supplier Refer to Manufacturer

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Reproductive toxicity	Category 2

Environmental hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

OSHA defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements

Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

No OSHA defined hazard classes.
Other hazards which do not result in classification: May cause respiratory irritation. May cause central nervous system effects. May cause discomfort if swallowed. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation. Prolonged or repeated overexposure may cause liver and kidney effects.
When heated above 150°C in air, may release formaldehyde gas. Formaldehyde is an eye and throat irritant and acute toxicant. Formaldehyde may cause sensitisation by skin contact. Formaldehyde has shown limited evidence of a carcinogenic effect.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Fiberglass Fibers	Not Available	65997-17-3	40 - 70
Silver	Silver-metal Argentum	7440-22-4	5 - 10
Dimethyl Siloxane, Hydroxy-terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated DIMETHYL(POLYSILOXANE)	70131-67-8	3 - 7
ETHYLBENZENE	ETHYLBENZOL PHENYLETHANE	100-41-4	1 - 5
M-XYLENE	M-BENZENE, DIMETHYL M-XYLOL	108-38-3	1 - 5
Trimethoxymethylsilane	METHYLTRIMETHOXYSILANE	1185-55-3	1 - 5
O-XYLENE	O-BENZENE, DIMETHYL O-XYLOL	95-47-6	0.5 - 1.5
P-XYLENE	P-BENZENE, DIMETHYL P-XYLOL	106-42-3	0.5 - 1.5
Titanium Dioxide	Titanium peroxide TIOXIDE	13463-67-7	0.1 - 1

Byproducts

Chemical name	CAS number	%
METHANOL	67-56-1	Not Known
ACETIC ACID	64-19-7	Not Known

Decomposition

Chemical name	CAS number	%
FORMALDEHYDE	50-00-0	Not Known

The exact concentrations of the above listed chemicals are being withheld as a trade secret as allowed by 29CFR1910.1200.

Composition comments

The above Byproducts are possible decomposition products in case of hydrolysis. The above decomposition products are released when the product is heated above 150ºC.

4. First-aid measures

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. When symptoms persist or in all cases of doubt, seek medical advice.

Skin contact

Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt, seek medical advice. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion

Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention.

Most important symptoms/effects, acute and delayed	May cause mild to moderate skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause mild to moderate eye irritation. Symptoms may include stinging and tearing. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. When heated above 150°C in air, may release formaldehyde gas. Formaldehyde is an eye and throat irritant and acute toxicant. Formaldehyde may cause sensitisation by skin contact. Formaldehyde has shown limited evidence of a carcinogenic effect.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water. May react with water.
Specific hazards arising from the chemical	During cure, vapours are released which may be harmful. Upon completion of the curing process, these hydrolysis products are no longer released.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Firefighters should wear full protective gear. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted. When heated above 150°C in air, may release formaldehyde gas. May slowly hydrolyze in the presence of water to: Acetic Acid. Methanol. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
Hazardous combustion products	Carbon oxides. Metal oxides. Formaldehyde. Silicon oxides. Aldehydes. Hydrocarbons.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Restrict access to area until completion of clean-up. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the contaminated area. Stop leak if you can do so without risk. Cover spilled solid with inert, absorbent material, such as sand, then place in suitable, covered container for later disposal. For waste disposal, see Section 13. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Use only in well-ventilated areas. Wear chemically resistant protective equipment during handling. Avoid breathing dust or fumes. Avoid contact with eyes, skin, and clothing. Keep away from heat and sources of ignition. Protect from moisture. Keep container tightly closed. Empty containers retain residue and can be dangerous. Wash hands after handling and before eating.
Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Inspect periodically for damage or leaks.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Decomposition	Type	Value
FORMALDEHYDE (CAS 50-00-0)	STEL	2 ppm

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Decomposition	Type	Value
	TWA	0.75 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ETHYLBENZENE (CAS 100-41-4)	PEL	435 mg/m3	
		100 ppm	
M-XYLENE (CAS 108-38-3)	PEL	435 mg/m3	
		100 ppm	
O-XYLENE (CAS 95-47-6)	PEL	435 mg/m3	
		100 ppm	
P-XYLENE (CAS 106-42-3)	PEL	435 mg/m3	
		100 ppm	
Silver (CAS 7440-22-4)	PEL	0.01 mg/m3	
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

Byproducts	Type	Value
ACETIC ACID (CAS 64-19-7)	PEL	25 mg/m3
		10 ppm
METHANOL (CAS 67-56-1)	PEL	260 mg/m3
		200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm	
Fiberglass Fibers (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fraction.
M-XYLENE (CAS 108-38-3)	STEL	150 ppm	
	TWA	100 ppm	
O-XYLENE (CAS 95-47-6)	STEL	150 ppm	
	TWA	100 ppm	
P-XYLENE (CAS 106-42-3)	STEL	150 ppm	
	TWA	100 ppm	
Silver (CAS 7440-22-4)	TWA	0.1 mg/m3	Dust and fume.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Byproducts	Type	Value
ACETIC ACID (CAS 64-19-7)	STEL	15 ppm
	TWA	10 ppm
METHANOL (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm

Decomposition	Type	Value
FORMALDEHYDE (CAS 50-00-0)	Ceiling	0.3 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
ETHYLBENZENE (CAS 100-41-4)	STEL	545 mg/m3	
		125 ppm	
	TWA	435 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
		100 ppm	
Fiberglass Fibers (CAS 65997-17-3)	TWA	3 fibers/cm3	Dust.
		3 fibers/cm3	Fiber.
		5 mg/m3	fibers, total dust
		5 mg/m3	Fiber, total
M-XYLENE (CAS 108-38-3)	STEL	655 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	
O-XYLENE (CAS 95-47-6)	STEL	655 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	
P-XYLENE (CAS 106-42-3)	STEL	655 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	
Silver (CAS 7440-22-4)	TWA	0.01 mg/m3	Dust.

Byproducts	Type	Value
ACETIC ACID (CAS 64-19-7)	STEL	37 mg/m3
		15 ppm
	TWA	25 mg/m3
		10 ppm
METHANOL (CAS 67-56-1)	STEL	325 mg/m3
		250 ppm
	TWA	260 mg/m3
		200 ppm

Decomposition	Type	Value
FORMALDEHYDE (CAS 50-00-0)	Ceiling	0.1 ppm
	TWA	0.016 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
ETHYLBENZENE (CAS 100-41-4)	0.7 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
M-XYLENE (CAS 108-38-3)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
O-XYLENE (CAS 95-47-6)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
P-XYLENE (CAS 106-42-3)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

Byproducts	Value	Determinant	Specimen	Sampling Time
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines Occupational Exposure Limits are not relevant to the current physical form of the product.

US - California OELs: Skin designation

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

METHANOL (CAS 67-56-1) Skin designation applies.

US - Tennesse OELs: Skin designation

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical goggles are recommended. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Advice should be sought from glove suppliers.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Solid. Paste.

Color Grey.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point This product has been tested in accordance with ASTM D4359, and was determined to be a solid. Therefore, flashpoint testing does not apply to this product.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble. May react with water.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity	Not available.
Other information	
Percent volatile	Negligible
Specific gravity	2
VOC (Weight %)	145 g/l

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport. May slowly hydrolyze in the presence of water to: Methanol. Acetic acid. Upon completion of the curing process, these hydrolysis products are no longer released.
Chemical stability	Material is stable under normal conditions. When heated above 150°C in air, may release formaldehyde gas.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Direct sources of heat. Do not use in areas without adequate ventilation. Protect from moisture.
Incompatible materials	Strong oxidizing agents. Strong acids. Bases. Water, moisture.
Hazardous decomposition products	Formaldehyde. Refer to hazardous combustion products in Section 5.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	May cause irritation to the respiratory system. May cause central nervous system effects.
Skin contact	May cause mild to moderate skin irritation.
Eye contact	May cause moderate eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	May cause mild to moderate eye irritation. Symptoms may include stinging and tearing. May cause mild to moderate skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Formaldehyde gas causes moderate to severe eye irritation. Formaldehyde causes severe respiratory irritation, lung inflammation and pulmonary edema. Formaldehyde may cause sensitisation by skin contact. Formaldehyde has shown limited evidence of a carcinogenic effect.

Information on toxicological effects

Acute toxicity The below product data is the calculated ATE values for this mixture. Individual ingredient component data appears below the product mixture ATE values.

Product	Species	Test Results
CHO-BOND 1035 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	12033 mg/kg
Inhalation		
LC50	Rat	110.81 mg/l
Oral		
LD50	Rat	14313 mg/kg

Components	Species	Test Results
Dimethyl Siloxane, Hydroxy-terminated (CAS 70131-67-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 11.59 mg/l, 4 Hours (mist)

Components	Species	Test Results
Oral		
LD50	Rat	> 15400 mg/kg
ETHYLBENZENE (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	15380 mg/kg
Inhalation		
LC50	Rat	4000 ppm, 4 hours (vapor)
		17.4 mg/l, 4 hours (vapor)
Oral		
LD50	Rat	3500 mg/kg
M-XYLENE (CAS 108-38-3)		
Acute		
Dermal		
LD50	Rabbit	12130 mg/kg
Inhalation		
LC50	Rat	7330 ppm, 4 hours (Vapor)
Oral		
LD50	Rat	5011 mg/kg
O-XYLENE (CAS 95-47-6)		
Acute		
Dermal		
LD50	Rabbit	3160 - 5010 mg/kg
Inhalation		
LC50	Rat	5305 ppm, 4 hours (Vapor)
Oral		
LD50	Rat	3000 mg/kg
P-XYLENE (CAS 106-42-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 ml/kg
Inhalation		
LC50	Rat	4740 ppm, 4 hours (Vapor)
Oral		
LD50	Rat	4030 mg/kg
Silver (CAS 7440-22-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	No Data in Literature
Oral		
LD50	Rat	> 2000 mg/kg
Titanium Dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Rabbit	> 10000 mg/kg
Inhalation		
LC50	Rat	> 6.82 mg/l, 4 Hours Dust

Components	Species	Test Results
Oral		
LD50	Rat	> 25000 mg/kg
Trimethoxymethylsilane (CAS 1185-55-3)		
Acute		
Dermal		
LD50	Rabbit	> 9500 mg/kg
Inhalation		
LC50	Rat	> 51.4 mg/l, 4 hours (Vapor)
Oral		
LD50	Rat	> 9500 mg/kg

Byproducts	Species	Test Results
ACETIC ACID (CAS 64-19-7)		
Acute		
Dermal		
LD50	Rabbit	1060 mg/kg
Inhalation		
LC50	Mouse	2810 ppm, 4 hours (vapor)
		6.95 mg/l, 4 Hours (vapor)
	Rat	4653 ppm, 4 hours (vapor)
		11.4 mg/l, 4 hours (vapor)
Oral		
LD50	Rat	3310 mg/kg
METHANOL (CAS 67-56-1)		
Acute		
Dermal		
LD50	Monkey	> 393 mg/kg
	Rabbit	15800 mg/kg
Inhalation		
LC50	Rat	> 4.1 mg/l/4h (vapor)
Oral		
LD50	Human	300 - 1000 mg/kg (estimated human lethal dose)
	Rat	5628 mg/kg

Decomposition	Species	Test Results
FORMALDEHYDE (CAS 50-00-0)		
Acute		
Dermal		
LD50	Rabbit	300 mg/kg
Inhalation		
LC50	Rat	287 ppm, 4 hours (gas)
Oral		
LD50	Human	317 - 475 mg/kg (estimated human lethal dose)
	Rat	800 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation May cause mild to moderate skin irritation.

Serious eye damage/eye irritation May cause moderate eye irritation.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ETHYLBENZENE (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Fiberglass Fibers (CAS 65997-17-3)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
FORMALDEHYDE (CAS 50-00-0)	1 Carcinogenic to humans.
M-XYLENE (CAS 108-38-3)	3 Not classifiable as to carcinogenicity to humans.
O-XYLENE (CAS 95-47-6)	3 Not classifiable as to carcinogenicity to humans.
P-XYLENE (CAS 106-42-3)	3 Not classifiable as to carcinogenicity to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

FORMALDEHYDE (CAS 50-00-0)	Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Fiberglass Fibers (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.
FORMALDEHYDE (CAS 50-00-0)	Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure Not classified as a specific target organ toxicity -single exposure.

Specific target organ toxicity - repeated exposure Not classified as a specific target organ toxicity -repeated exposure.

Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Silver in the form of a finely divided dust may cause discoloration in contact with skin and argyrosis in case of inhalation. Prolonged or repeated overexposure may cause liver and kidney effects.

Aspiration toxicity Not likely, due to the form of the product.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
ETHYLBENZENE (CAS 100-41-4)			
Aquatic			
Acute			
Algae	EC50	Green algae (Selenastrum capricornutum)	3.6 mg/l, 96 hours
Crustacea	EC50	Water flea (Daphnia magna)	1.81 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.2 mg/l, 96 hours
M-XYLENE (CAS 108-38-3)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	4.9 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	4.7 mg/l, 24 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.4 mg/l, 96 hours
O-XYLENE (CAS 95-47-6)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	4.7 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	1 mg/l, 24 hours

Components		Species	Test Results
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.6 mg/l, 96 hours
P-XYLENE (CAS 106-42-3)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	4.36 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	3.6 mg/l, 24 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.6 mg/l, 96 hours
Chronic			
Algae	NOEC	Green Algae (Pseudokirchneriella subcapitata)	0.44 mg/l, 72 hours
Crustacea	NOEC	Water flea (Daphnia magna)	1.57 mg/l, 21 days
Trimethoxymethylsilane (CAS 1185-55-3)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	> 120 mg/l, 72 hours (hydrolysis product and/or parent compound)
Crustacea	EC50	Water flea (Daphnia magna)	> 122 mg/l, 48 hours (hydrolysis product and/or parent compound)
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 110 mg/l, 96 hours (hydrolysis product and/or parent compound)
Chronic			
Algae	NOEC	Green Algae (Pseudokirchneriella subcapitata)	120 mg/l, 72 hours (hydrolysis product and/or parent compound)

Byproducts		Species	Test Results
ACETIC ACID (CAS 64-19-7)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	65 mg/l, 48 hours
Fish	LC50	Zebra danio (Danio rerio)	> 300.82 mg/l, 96 hours
Chronic			
Crustacea	NOEC	Water flea (Daphnia magna)	37.9 mg/l, 21 day
METHANOL (CAS 67-56-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Acute			
Algae	EC50	Green algae (Scenedesmus quadricauda)	> 1000 mg/l, 96 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	15400 mg/l, 96 hours

Decomposition		Species	Test Results
FORMALDEHYDE (CAS 50-00-0)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	5.8 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	6.7 mg/l, 96 hours
Chronic			
Fish	NOEC	Japanese rice fish (Oryzias latipes)	> 48 mg/l, 28 days

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

ETHYLBENZENE	3.15
M-XYLENE	3.2
O-XYLENE	3.12
P-XYLENE	3.15
ACETIC ACID	-0.17
METHANOL	-0.77
FORMALDEHYDE	0.35

Bioconcentration factor (BCF)

ETHYLBENZENE	1.1 - 1.5
ACETIC ACID	3.2
FORMALDEHYDE	3

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

FORMALDEHYDE (CAS 50-00-0)	U122
METHANOL (CAS 67-56-1)	U154
M-XYLENE (CAS 108-38-3)	U239
O-XYLENE (CAS 95-47-6)	U239
P-XYLENE (CAS 106-42-3)	U239

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETIC ACID (CAS 64-19-7)	Listed.
ETHYLBENZENE (CAS 100-41-4)	Listed.
METHANOL (CAS 67-56-1)	Listed.
M-XYLENE (CAS 108-38-3)	Listed.
O-XYLENE (CAS 95-47-6)	Listed.
P-XYLENE (CAS 106-42-3)	Listed.
Silver (CAS 7440-22-4)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
FORMALDEHYDE	50-00-0	100	500 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Silver	7440-22-4	5 - 10
ETHYLBENZENE	100-41-4	1 - 5
M-XYLENE	108-38-3	1 - 5
O-XYLENE	95-47-6	0.5 - 1.5
P-XYLENE	106-42-3	0.5 - 1.5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

ETHYLBENZENE (CAS 100-41-4)
METHANOL (CAS 67-56-1)
M-XYLENE (CAS 108-38-3)
O-XYLENE (CAS 95-47-6)
P-XYLENE (CAS 106-42-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

ACETIC ACID (CAS 64-19-7)
ETHYLBENZENE (CAS 100-41-4)
Fiberglass Fibers (CAS 65997-17-3)
METHANOL (CAS 67-56-1)
M-XYLENE (CAS 108-38-3)
O-XYLENE (CAS 95-47-6)
P-XYLENE (CAS 106-42-3)
Silver (CAS 7440-22-4)
Titanium Dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act

ACETIC ACID (CAS 64-19-7)
ETHYLBENZENE (CAS 100-41-4)
Fiberglass Fibers (CAS 65997-17-3)
METHANOL (CAS 67-56-1)
M-XYLENE (CAS 108-38-3)
O-XYLENE (CAS 95-47-6)
P-XYLENE (CAS 106-42-3)
Silver (CAS 7440-22-4)
Titanium Dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law

ACETIC ACID (CAS 64-19-7)
ETHYLBENZENE (CAS 100-41-4)
Fiberglass Fibers (CAS 65997-17-3)

METHANOL (CAS 67-56-1)
M-XYLENE (CAS 108-38-3)
O-XYLENE (CAS 95-47-6)
P-XYLENE (CAS 106-42-3)
Silver (CAS 7440-22-4)
Titanium Dioxide (CAS 13463-67-7)

US. Rhode Island RTK

ACETIC ACID (CAS 64-19-7)
ETHYLBENZENE (CAS 100-41-4)
METHANOL (CAS 67-56-1)
M-XYLENE (CAS 108-38-3)
O-XYLENE (CAS 95-47-6)
P-XYLENE (CAS 106-42-3)
Silver (CAS 7440-22-4)

US. California Proposition 65

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

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHYLBENZENE (CAS 100-41-4)	Listed: June 11, 2004
Fiberglass Fibers (CAS 65997-17-3)	Listed: July 1, 1990
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

US - California Proposition 65 - CRT: Listed date/Developmental toxin

METHANOL (CAS 67-56-1)	Listed: March 16, 2012

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-20-2014

Version # 01

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CEPA: Canadian Environmental Protection Act
CPR: Controlled Products Regulation
CSA: Canadian Standards Association
DOT: Department of Transportation
DSL: Domestic Substance List
HMIS: Hazardous Materials Identification System
HPA: Hazardous Protection Act
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
IMDG: International Maritime Dangerous Goods
LC: Lethal Concentration
LD: Lethal Dose
NFPA: National Fire Protection Association
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co operation and Development
OEL: National occupational exposure limits
OSHA: Occupational Safety and Health Administration
PPE: Personal Protective Equipment
RCRA: Resource Conservation and Recovery Act
RQ: Reportable Quantity
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
WEL: Workplace Exposure Limit

Disclaimer

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