



Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 06.14.2024

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VOLTERA NORMAL PRIMER HARDENER - FOR USE WITH VS700 SERIES PRIMER

SECTION 1: Identification

Product Identifier

Product Name: VOLTERA NORMAL PRIMER HARDENER

Product code: VS702

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Not determined or not applicable.

Uses Advised Against: Not determined or not applicable.

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:

United States

Collision Quest Inc.

394 Kilburn Street

Fall River, MA 02724

833-272-6274

Emergency Telephone Number:

United States

Chemtrec

800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Flammable liquids, category 3

Skin irritation, category 2

Eye irritation, category 2A

Respiratory sensitization, category 1

Skin sensitization, category 1

Carcinogenicity, category 1B

Reproductive toxicity, category 2

Specific target organ toxicity - single exposure, category 3, respiratory tract irritation

Specific target organ toxicity - single exposure, category 3, narcotic effects

Specific target organ toxicity - repeated exposure, category 2

Aspiration hazard, category 1

Label elements

Hazard Pictograms:



Signal Word: Danger

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Hazard statements:

- H226 Flammable liquid and vapor
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317 May cause an allergic skin reaction
- H350 May cause cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
- H304 May be fatal if swallowed and enters airways

Precautionary Statements:

- P210 Keep away from sparks, open flames and hot surfaces. No smoking.
- P233 Keep container tightly closed
- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical, ventilating, and lighting equipment.
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P280 Wear protective gloves, protective clothing and eye protection.
- P264 Wash skin thoroughly after handling.
- P261 Do not breathe mist, vapors or spray.
- P284 In case of inadequate ventilation wear respiratory protection.
- P272 Contaminated work clothing must not be allowed out of the workplace
- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P271 Use only outdoors or in a well-ventilated area
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.
- P302+P352 IF ON SKIN: Wash with plenty of water and soap.
- P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).
- P332+P313 If skin irritation occurs: Get medical advice/attention
- P362 Take off contaminated clothing and wash it before reuse
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P337+P313 If eye irritation persists: Get medical advice or attention.
- P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER.
- P333+P313 If skin irritation or rash occurs: Get medical advice or attention.
- P363 Wash contaminated clothing before reuse
- P308+P313 If exposed or concerned: Get medical advice or attention.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P312 Call a POISON CENTER if you feel unwell.
- P314 Get medical advice or attention if you feel unwell.
- P331 Do NOT induce vomiting

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P301+P310 IF SWALLOWED: Immediately call a POISON CENTER.

P403+P235 Store in a well-ventilated place. Keep cool

P405 Store locked up

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P501 Dispose of contents and container in accordance with federal, state and local regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 28182-81-2	Hexamethylene diisocyanate, oligomers	30-50
CAS Number: 108-88-3	Toluene	10-30
CAS Number: 123-86-4	n-Butyl acetate	10-20
CAS Number: 1330-20-7	Xylene	10-20
CAS Number: 25551-13-7	Trimethylbenzene	5-10
CAS Number: 95-63-6	1, 2, 4-Trimethylbenzene	5-10
CAS Number: 100-41-4	Ethylbenzene	1-5
CAS Number: 98-82-8	Cumene	1-5
CAS Number: 822-06-0	Hexamethylene diisocyanate	1-3
CAS Number: 25155-15-1	Cymene	1-3

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention

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After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

This product presents an aspiration hazard. If aspiration is suspected, seek emergency medical treatment. If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Product is flammable. Exposure to sources of ignition may cause physical injury.

Skin contact may result in redness, pain, burning and inflammation.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Inhalation exposure may cause allergy, asthma symptoms or breathing difficulties. Symptoms may include cough, chronic phlegm, shortness of breath, wheezing and chest tightness. Symptoms may be delayed.

Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.

Inhalation may have adverse effects on the respiratory tract. Symptoms may include cough, breathing difficulties, sore throat and inflammation of the mucous membrane lining the respiratory tract.

Inhalation may have adverse effects on the central nervous system. Symptoms may include drowsiness, dizziness, headache, nausea and lowering of consciousness. Acute overexposure via inhalation may result in respiratory distress, confusion and unconsciousness.

May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis. Symptoms may include shortness of breath, dry cough and irritation of the nose, eyes, lips, mouth and throat.

Delayed Symptoms and Effects:

Effects are dependent on exposure (dose, concentration, contact time).

Exposure may cause cancer. Effects are dependent on exposure (dose, concentration, contact time).

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

May cause damage to organs through prolonged or repeated exposure. Effects are dependent on exposure (dose, concentration, contact time).

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Symptoms of pulmonary edema may be delayed.

Immediate Medical Attention and Special Treatment

Specific Treatment:

Skin/eye burns require immediate treatment.

If respiratory symptoms persist, seek medical attention.

Overexposure via inhalation requires urgent medical treatment.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

Thermal decomposition may produce irritating/toxic fumes/gases.

Special Protective Equipment for Firefighters:

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

Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts.

Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers.

Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

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Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Avoid breathing dust, mist, fumes, vapors or spray. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Ethylbenzene	100-41-4	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Toluene	108-88-3	8-Hour TWA-PEL: 200 ppm
	Toluene	108-88-3	Ceiling Limit: 300 ppm (Table Z-2)
	Toluene	108-88-3	Peak Exposure Limit Value: 500 ppm (for an 8 hr shift; duration: 10 minutes [Table Z-2])
	n-Butyl acetate	123-86-4	8-Hour TWA-PEL: 710 mg/m ³ (150 ppm)
	n-Butyl acetate	123-86-4	STEL: 950 mg/m ³ (200 ppm)
	Cumene	98-82-8	8-Hour TWA-PEL: 245 mg/m ³ (50 ppm)
	Xylene	1330-20-7	8-Hour TWA: 435 mg/m ³ (100 ppm)
NIOSH	Ethylbenzene	100-41-4	REL-TWA: 435 mg/m ³ (100 ppm [10-hr])
	Ethylbenzene	100-41-4	15-Minute STEL: 545 mg/m ³ (125 ppm)
	Ethylbenzene	100-41-4	IDLH: 800 ppm
	Toluene	108-88-3	REL-TWA: 375 mg/m ³ (100 ppm [up to 10 hr])
	Toluene	108-88-3	15-Minute STEL: 560 mg/m ³ (150 ppm)
	Toluene	108-88-3	IDLH: 500 ppm
	n-Butyl acetate	123-86-4	REL-TWA: 710 mg/m ³ (150 ppm)
	n-Butyl acetate	123-86-4	STEL: 950 mg/m ³ (200 ppm)
	n-Butyl acetate	123-86-4	IDLH: 1700 ppm
	Trimethylbenzene	25551-13-7	REL-TWA: 125 mg/m ³ (25 ppm; [for up to a 10-hour workday])
	Hexamethylene diisocyanate	822-06-0	Ceiling Limit: 0.14 mg/m ³ (0.02 ppm [10-min])
	Hexamethylene diisocyanate	822-06-0	REL-TWA: 0.035 mg/m ³ (0.005 ppm [up to 10 hr])
	1, 2, 4-Trimethylbenzene	95-63-6	REL-TWA: 125 mg/m ³ (25 ppm [up to 10 hr])
	Cumene	98-82-8	REL-TWA: 245 mg/m ³ (50 ppm [10-hour workday])
	Cumene	98-82-8	IDLH: 900 ppm
	Xylene	1330-20-7	IDLH: 900 ppm
	Xylene	1330-20-7	15-Minute STEL: 655 mg/m ³ (150 ppm)
	Xylene	1330-20-7	REL-TWA: 435 mg/m ³ (100 ppm [up to 10 hr])
United States(California)	Ethylbenzene	100-41-4	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Ethylbenzene	100-41-4	15-Minute STEL: 545 mg/m ³ (125 ppm)
	Toluene	108-88-3	8-Hour TWA-PEL: 37 mg/m ³ (10 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Toluene	108-88-3	15-Minute STEL: 560 mg/m ³ (150 ppm)
	Toluene	108-88-3	Ceiling Limit: 500 ppm
	n-Butyl acetate	123-86-4	8-Hour TWA-PEL: 710 mg/m ³ (150 ppm)
	n-Butyl acetate	123-86-4	15-Minute STEL: 0 mg/m ³ (200 ppm)
	Trimethylbenzene	25551-13-7	8-Hour TWA-PEL: 125 mg/m ³ (25 ppm)
	Hexamethylene diisocyanate	822-06-0	8-Hour TWA-PEL: 0.034 mg/m ³ (0.005 ppm)
	1, 2, 4-Trimethylbenzene	95-63-6	8-Hour TWA: 125 mg/m ³ (25 ppm)
	Cumene	98-82-8	8-Hour TWA: 245 mg/m ³ (50 ppm)
	Xylene	1330-20-7	Ceiling Limit: 300 ppm
	Xylene	1330-20-7	15-Minute STEL: 655 mg/m ³ (150 ppm)
	Xylene	1330-20-7	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Xylene	1330-20-7	PEL Ceiling: 300 ppm
	Xylene	1330-20-7	PEL Ceiling: 300 ppm
ACGIH	Ethylbenzene	100-41-4	8-Hour TWA: 20 ppm
	Toluene	108-88-3	8-Hour TWA: 20 ppm
	n-Butyl acetate	123-86-4	TLV-TWA: 50 ppm
	n-Butyl acetate	123-86-4	15-Minute STEL: 150 ppm
	Trimethylbenzene	25551-13-7	TLV-TWA: 10 ppm (8 hr)
	Hexamethylene diisocyanate	822-06-0	8-Hour TWA: 0.005 ppm
	1, 2, 4-Trimethylbenzene	95-63-6	TLV-TWA: 10 ppm (8 hr)
	Cumene	98-82-8	TLV-TWA: 5 ppm (8 hr)
	Xylene	1330-20-7	8-Hour TWA: 20 ppm

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Ethylbenzene	100-41-4	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	End of shift.	0.15 g/g
	Toluene	108-88-3	Toluene	Blood	Prior to last shift of work week	0.02 mg/L
	Toluene	108-88-3	o-Cresol, with hydrolysis	Creatinine in urine	End of shift	0.3 mg/g
	Toluene	108-88-3	Toluene	Urine	End of shift	0.03 mg/L
	Hexamethylene diisocyanate	822-06-0	Hexamethylenediamine (with hydrolysis)	Creatinine in urine	End of shift	15 µg/g
	Xylene	1330-20-7	Methylhippuric acids	Creatinine in urine	End of shift.	1.5 g/g

Information on Monitoring Procedures:

Not determined or not applicable.

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Appropriate Engineering Controls:

Use explosion-proof local exhaust, mechanical ventilation or additional engineering controls to maintain airborne concentrations below any occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.

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Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and Reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials. Vapor accumulation in low or confined areas.

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

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

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
Ethylbenzene	inhalation	LC50 Rat: 17.8 mg/L (4 hr [vapor])
	oral	LD50 Rat: 3500 mg/kg
	dermal	LD50 Rabbit: 15,400 mg/kg
Toluene	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: >5000 mg/kg
	inhalation	LC50 Rat: 25.7 mg/L (4 hr [Vapor])
n-Butyl acetate	oral	LD50 Rat: 10,760 mg/kg
	dermal	LD50 Rabbit: > 14,112 mg/kg
Xylene	Dermal ATE	LD50 Rabbit: 1100 mg/kg
	Inhalation ATE	LC50 Rat: 11 mg/L (4 h [vapor])
	oral	LD50 Rat: 3523 mg/kg
Trimethylbenzene	Oral ATE	LD50 Rat: 500 mg/kg
	Dermal ATE	LD50 Rabbit: 1100 mg/kg

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Name	Route	Result
Hexamethylene diisocyanate, oligomers	dermal	LD50 Rabbit: > 2000 mg/kg
	Inhalation ATE	LC50 Rat: 11 mg/L
Hexamethylene diisocyanate	oral	LD50 Rat: 959 mg/m ³
	inhalation	LC50 Rat: 0.124 mg/L (4 hr [Vapor])
	dermal	LD50 Rat: >7000 mg/kg
1, 2, 4-Trimethylbenzene	inhalation	LC50 Rat: 10.2 mg/L (4 hr [vapor])
	oral	LD50 Rat: 6000 mg/kg
	dermal	LD50 Rat: >3440 mg/kg
Cumene	oral	LD50 Rat: 2700 mg/kg
	dermal	LD50 Rabbit: > 3160 mg/kg
	inhalation	LC50 Rat: 10 mg/L (7 hr [Vapour])

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

Name	Result
Toluene	Causes skin irritation.
Xylene	Causes skin irritation.
Trimethylbenzene	Causes skin irritation.
Hexamethylene diisocyanate	Causes skin irritation.
1, 2, 4-Trimethylbenzene	Causes skin irritation.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye irritation.

Product Data:

No data available.

Substance Data:

Name	Result
Trimethylbenzene	Causes serious eye irritation.
Hexamethylene diisocyanate	Causes serious eye irritation.
1, 2, 4-Trimethylbenzene	Causes serious eye irritation.

Respiratory or Skin Sensitization

Assessment:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

Name	Result
Hexamethylene diisocyanate, oligomers	May cause an allergic skin reaction.

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Name	Result
Hexamethylene diisocyanate	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carcinogenicity

Assessment:

May cause cancer.

Product Data: No data available.

Substance Data:

Name	Species	Result
Cumene		May cause cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Ethylbenzene	Group 2B
Toluene	Group 3
n-Butyl acetate	Not Applicable
Cymene	Not Applicable
Trimethylbenzene	Not Applicable
Hexamethylene diisocyanate, oligomers	Not Applicable
Hexamethylene diisocyanate	Not Applicable
1, 2, 4-Trimethylbenzene	Not Applicable
Cumene	Group 2B
Xylene	Group 3

National Toxicology Program (NTP):

Name	Classification
Ethylbenzene	Not Applicable
Toluene	Not Applicable
n-Butyl acetate	Not Applicable
Cymene	Not Applicable
Trimethylbenzene	Not Applicable
Hexamethylene diisocyanate, oligomers	Not Applicable
Hexamethylene diisocyanate	Not Applicable
1, 2, 4-Trimethylbenzene	Not Applicable
Cumene	Reasonably anticipated to be human carcinogens
Xylene	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Reproductive Toxicity

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Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
Toluene	Suspected of damaging fertility or the unborn child .

Specific Target Organ Toxicity (Single Exposure)

Assessment:

May cause respiratory irritation.

May cause drowsiness or dizziness.

Product Data:

No data available.

Substance Data:

Name	Result
Toluene	May cause drowsiness or dizziness.
n-Butyl acetate	May cause drowsiness or dizziness.
Hexamethylene diisocyanate, oligomers	May cause respiratory irritation.
Hexamethylene diisocyanate	May cause respiratory irritation.
1, 2, 4-Trimethylbenzene	May cause respiratory irritation.
Cumene	May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment:

May cause damage to organs through prolonged or repeated exposure.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylbenzene	May cause damage to organs (hearing; central nervous system) through prolonged or repeated exposure.
Toluene	May cause damage to organs (central nervous system; kidneys; liver) through prolonged or repeated exposure. Exposure to the substance may increase noise-induced hearing loss.

Aspiration toxicity

Assessment:

May be fatal if swallowed and enters airways.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylbenzene	May be fatal if swallowed and enters airways.
Toluene	May be fatal if swallowed and enters airways.
Cymene	May be fatal if swallowed and enters airways.
1, 2, 4-Trimethylbenzene	May be fatal if swallowed and enters airways.

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Name	Result
Cumene	May be fatal if swallowed and enters airways.
Xylene	May be fatal if swallowed and enters airways.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Ethylbenzene	Fish LC50 Menidia menidia: 5.1 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 1.8 - 2.4 mg/L (48 hr [adult length, weight, reproduction, age at first brood release, neonate length and weight])
	Aquatic Plants EC50 Raphidocelis subcapitata: 3.6 mg/L (96 hr [cell number])
Toluene	Fish LC50 Oncorhynchus kisutch: 5.5 mg/L (96 hr)
	Aquatic Invertebrates EC50 Ceriodaphnia dubia: 3.78 mg/L (48 h [mortality])
	Aquatic Plants EC50 Chlorella vulgaris and Chlamydomonas angulosa: 134 mg/L (3 h [photosynthesis rate])
n-Butyl acetate	Fish LC50 Pimephales promelas: 18 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia sp.: 44 mg/L (48 hr [mobility])
Hexamethylene diisocyanate	Fish LC50 Danio rerio: >82.8 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >=89.1 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodemus subspicatus: >77.4 mg/L (72 hr [growth rate])
1, 2, 4-Trimethylbenzene	Fish LC50 Pimephales promelas: 7.72 mg/L (96 hr)
	Aquatic Invertebrates LC50 Daphnia magna: 3.6 mg/L (48 hr)
	Aquatic Plants EC50 Green algae: 2.356 mg/L (96 hr [QSAR])
Cumene	Fish LC50 Cyprinodon variegatus: 4.7 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.14 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodemus subspicatus: 2.01 mg/L (72 hr [growth rate])
Xylene	Fish LC50 Oncorhynchus mykiss: 2.6 mg/L (96 hr [Read-across substance data])
	Aquatic Plants EC50 Raphidocelis subcapitata: 4.9 mg/L (72 hr [growth inhibition, Read-across substance data])

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

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Product Data: No data available.

Substance Data:

Name	Result
Toluene	Fish NOEC Oncorhynchus kisutch: 1.39 mg/L (40 d [growth rate])
	Aquatic Invertebrates NOEC Ceriodaphnia dubia: 0.74 mg/L (7 d [reproduction])
n-Butyl acetate	Aquatic Invertebrates NOEC Daphnia magna: 23.2 mg/L (21 d [reproduction])
	Aquatic Plants NOEC Raphidocelis subcapitata: 105 mg/L (72 hr [biomass])
Cumene	Fish NOEC Danio rerio and Pimephales promelas: 0.38 mg/L (28 d [QSAR])
	Aquatic Invertebrates NOEC Daphnia magna: 0.35 mg/L (21 d [reproduction and survival of parent animals])
Xylene	Fish NOEC Danio rerio: 0.714 mg/L (35 d [post hatch survival and overall survival Read-across substance data])
	Aquatic Invertebrates NOEC Daphnia magna: 1.57 mg/L (21 d [reproduction, Read-across substance data])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Ethylbenzene	The substance is readily biodegradable. 70 - 80% degradation in water, measured by inorganic Carbon analysis, after 28 days.
Toluene	The substance is Readily biodegradable. 86% degradation in water, measured by BOD/ThOD, after 20 days.
n-Butyl acetate	The substance is Readily biodegradable meeting the 10 day window. 83% degradation in water, measured by O2 consumption, after 28 days.
Xylene	The substance is readily biodegradable .94% degradation in water, measured by O2 consumption, after 28 days (Read-across substance data).
Hexamethylene diisocyanate, oligomers	The substance is not readily biodegradable.1% degradation in water, measured by O2 consumption, after 28 days.
Hexamethylene diisocyanate	The substance is not readily biodegradable. 42% degradation in water, measured by O2 consumption, after 28 days.
1, 2, 4-Trimethylbenzene	Based on a weight of evidence assessment, this substance does not meet the criteria for ready biodegradability but is considered to be biodegradable and would not be persistent in the environment.
Cumene	The substance is readily biodegradable.70% degradation in water, measured by O2 consumption, after 20 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Toluene	The substance is not expected to bioaccumulate (Log Pow=2.73)
n-Butyl acetate	The substance is not expected to bioaccumulate (log Pow=2.3).
Xylene	The substance is not expected to bioaccumulate (BCF=25.9 dimensionless).
Hexamethylene diisocyanate	The substance has low potential for bioaccumulation. BCF (aquatic species): 59.6 [QSAR]

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Name	Result
1, 2, 4-Trimethylbenzene	Substance has the potential to bioaccumulate (calculated BCF: 243).
Cumene	The substance has the potential to bioaccumulate (log Pow= 3.55 at 23 °C).
Hexamethylene diisocyanate, oligomers	The substance has the potential to bioaccumulate (log Kow: 3.2, QSAR substance data).
Ethylbenzene	The substance has the potential to bioaccumulate (BCF: 110 L/kg ww, aquatic species and log Pow : 3.6 at 20°C).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Toluene	The substance is moderately mobile, therefore slight adsorption to soil is expected (Koc=205).
n-Butyl acetate	The substance is mobile, therefore, adsorption to soil is not expected (log Koc=1.27).
Xylene	The substance is moderately mobile, therefore, slight adsorption to soil is expected (log Koc=2.73 dimensionless, Read-across substance data).
Hexamethylene diisocyanate	The substance is moderately mobile then it has a moderate potential for adsorption to soil and sediment. [Calculated Koc at 20 °C: 598].
1, 2, 4-Trimethylbenzene	Substance is slightly mobile with a high potential for adsorption to soil and sediment (calculated log Koc: 3.04).
Cumene	The substance is moderately mobile; therefore, slight adsorption to soil is expected (log Koc: 2.946).
Hexamethylene diisocyanate, oligomers	The substance is slightly mobile, therefore, adsorption to soil and sediment is expected (log Koc:3.682, QSAR substance data)..
Ethylbenzene	The substance is slightly mobile, therefore, adsorption to soil and sediment is expected (log Koc = 3.12).

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

Ethylbenzene	The substance is not PBT.
Toluene	The substance is not a PBT.
n-Butyl acetate	The substance is not PBT.
Hexamethylene diisocyanate	The Substance is not PBT.
1, 2, 4-Trimethylbenzene	This substance is not PBT.
Cumene	The substance is not PBT.
Xylene	The substance is not PBT.

vPvB assessment:

Ethylbenzene	The substance is not vPvB.
Toluene	The substance is not a vPvB.
n-Butyl acetate	The substance is not vPvB.
Hexamethylene diisocyanate	The substance is not vPvB.

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1, 2, 4-Trimethylbenzene	This substance is not vPvB.
Cumene	The substance is not vPvB.
Xylene	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:


It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:


Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	UN-1263
UN Proper Shipping Name	Paint related material including paint thinning, drying, removing, or reducing compound
UN Transport Hazard Class(es)	3 
Packing Group	II
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	UN-1263
UN Proper Shipping Name	Paint related material including paint thinning, drying, removing, or reducing compound
UN Transport Hazard Class(es)	3 
Packing Group	II
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

SECTION 15: Regulatory Information

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United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
822-06-0	Hexamethylene diisocyanate	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed

CERCLA:

100-41-4	Ethylbenzene	Listed	1000 lb
108-88-3	Toluene	Listed	1000 lbs
123-86-4	n-Butyl acetate	Listed	5000 lb
25155-15-1	Cymene	Listed	100 lbs for RCRA D001
822-06-0	Hexamethylene diisocyanate	Listed	100 lbs
98-82-8	Cumene	Listed	5000 lb
1330-20-7	Xylene	Listed	100 lbs

RCRA:

100-41-4	Ethylbenzene	Listed	F003, D001
108-88-3	Toluene	Listed	U220
123-86-4	n-Butyl acetate	Listed	D001
25155-15-1	Cymene	Listed	D001
98-82-8	Cumene	Listed	U055
1330-20-7	Xylene	Listed	U239

Section 112(r) of the Clean Air Act (CAA):

100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
822-06-0	Hexamethylene diisocyanate	Listed

Massachusetts Right to Know:

100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
123-86-4	n-Butyl acetate	Listed
25551-13-7	Trimethylbenzene	Listed
822-06-0	Hexamethylene diisocyanate	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed

New Jersey Right to Know:

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100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
123-86-4	n-Butyl acetate	Listed
25155-15-1	Cymene	Listed
25551-13-7	Trimethylbenzene	Listed
822-06-0	Hexamethylene diisocyanate	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed

New York Right to Know:

100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
123-86-4	n-Butyl acetate	Listed
25155-15-1	Cymene	Listed
25551-13-7	Trimethylbenzene	Listed
822-06-0	Hexamethylene diisocyanate	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed

Pennsylvania Right to Know:

100-41-4	Ethylbenzene	Listed
108-88-3	Toluene	Listed
123-86-4	n-Butyl acetate	Listed
25551-13-7	Trimethylbenzene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed

California Proposition 65:

⚠️WARNING: This product can expose you to chemicals including Ethyl Benzene and Cumene; which are known to the State of California to cause cancer; and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet