

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200 Initial Preparation Date: 06.30.2016 Revision date: 02.14.2022

Bead Breaker

SECTION 1: Identification

Product Identifier

Product Name: Bead Breaker Product code: 734, 734Q, 734-5G, 734-55G Additional information: Rev. 5

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Release bead from rim Uses Advised Against: Not determined or not applicable. Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer: North America Tech International 200 East Coshocton Street Johnstown, OH 43031 1-740-967-9015 www.tech-international.com

Emergency Telephone Number:

North America

CHEMTREC (NA) Within USA and Canada: 1-800-424-9300 (24 hours) Outside USA and Canada: +1-703-527-3887

SECTION 2: Hazard(s) Identification

GHS Classification:

Flammable liquids, category 3 Acute toxicity (dermal), category 4 Acute toxicity (inhalation), category 4 Skin irritation, category 2 Eye irritation, category 2A Reproductive toxicity, category 2 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

H361 Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways

H312 Harmful in contact with skin

H332 Harmful if inhaled

Precautionary Statements:

P210 Keep away from heat, 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 hands thoroughly after handling.

P201 Obtain special instructions before use

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

P260 Do not breathe dust, fumes, gas, mist, vapors or spray.

P271 Use only outdoors or in a well-ventilated area

P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).

P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P362 Take off contaminated clothing and wash it before reuse

P332+P313 If skin irritation occurs: Get medical advice and attention.

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 and attention.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 Do NOT induce vomiting

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 or doctor/physician if you feel unwell

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

P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 1330-20-7	Xylene	50-70

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CAS Number: 64742-47-8	Distillates (petroleum), hydrotreated light*	30-50
CAS Number: 64742-48-9	Naphtha (petroleum), hydrotreated heavy*	30-50
CAS Number: 100-41-4	Ethyl Benzene	10-20
CAS Number: 64742-95-6	Solvent naphtha (petroleum), light arom.	5-10
CAS Number: 108-88-3	Toluene	1-5
CAS Number: 25551-13-7	Trimethylbenzene	1-5
CAS Number: 111-76-2	2-Butoxyethanol	1-5
CAS Number: 95-63-6	1, 2, 4-Trimethylbenzene	1-5
CAS Number: 98-82-8	Cumene	0.1-1

Additional Information:

The substance "Solvent Naphtha (Petroleum), Light Aromatic" (CAS 64742-48-9) and "Naphtha (petroleum), hydrotreated heavy" (CAS 64742-95-6) should not be classified as a "carcinogen" or "mutagen" ingredient, because the benzene content is lower than 0.1% in weight.

*The total concentration of Naphtha (Petroleum), hydrotreated light & heavy is 30 - 50%.

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance. Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment recommendations. Do not use the mouth to mouth method if victim has ingested or inhaled the product. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper device.

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.

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 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.

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After Swallowing:

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.

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.

Acute dermal exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Acute inhalation exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Delayed Symptoms and Effects:

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).

Symptoms of pulmonary edema may be delayed.

Long term exposure to toluene may affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

Prolonged or repeated exposure to toluene may cause damage to organs (neuropsychological effects, auditory dysfunction and effects on color vision).

Prolonged or repeated exposure to ethyl benzene may cause damage to hearing organs.

Immediate Medical Attention and Special Treatment

Specific Treatment:

Skin/eye burns require immediate treatment.

Over-exposure, via inhalation or dermal contact, 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.

Unsuitable Extinguishing Media:

Do not use water jet.

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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.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

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:

Harmful if inhaled. Put on appropriate personal protective equipment, including a self-contained breathing apparatus (see Section 8) before entering area of spill or leak. Avoid breathing dust, mist, fumes, vapors or spray. 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).

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.

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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.

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.

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Xylene	1330-20-7	8-Hour TWA: 100 ppm
	Xylene	1330-20-7	15-Minute STEL: 150 ppm
	Distillates (petroleum), hydrotreated light*	64742-47-8	TLV-TWA: 200 mg/m ³ (Kerosene and jet-fuels [non-aerosol], as total hydrocarbon vapor)
	Ethyl Benzene	100-41-4	8-Hour TWA: 20 ppm
	Toluene	108-88-3	TLV-TWA: 20 ppm (8 hr)
	Trimethylbenzene	25551-13-7	TLV-TWA: 10 ppm (8 hr)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 20 ppm
	1, 2, 4-Trimethylbenzene	95-63-6	TLV-TWA: 10 ppm (8 hr)
	Cumene	98-82-8	TLV-TWA: 5 ppm (8 hr)
OSHA	Xylene	1330-20-7	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Distillates (petroleum), hydrotreated light*	64742-47-8	8-Hour TWA-PEL: 2000 mg/m ³ (500 ppm [aliphatic hydrocarbons])
	Naphtha (petroleum), hydrotreated heavy*	64742-48-9	8-Hour TWA-PEL: 2000 mg/m ³ (500 ppm [petroleum distillates] - A single TWA does not sufficiently cover this broad category. The concentration of benzene and other aromatic hydrocarbons should also be considered.)
	Ethyl Benzene	100-41-4	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Ethyl Benzene	100-41-4	STEL: 545 mg/m ³ (125 ppm)
	Toluene	108-88-3	8-Hour TWA: 200 ppm (Table Z-2)
	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])
	Toluene	108-88-3	TWA: 375 mg/m ³ (100 ppm; [Table Z-1-A])
	Toluene	108-88-3	STEL: 560 mg/m ³ (150 ppm; [Table Z-1-A])
	Trimethylbenzene	25551-13-7	TWA: 125 mg/m ³ (25 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m ³ (50 ppm [Table Z-1])

Occupational Exposure Limit Values:

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	2-Butoxyethanol	111-76-2	8-Hour TWA: 120 mg/m ³ (25 ppm [Table Z-1-A])
	1, 2, 4-Trimethylbenzene	95-63-6	8-Hour TWA: 125 mg/m ³ (25 ppm)
	Cumene	98-82-8	8-Hour TWA-PEL: 245 mg/m ³ (50 ppm)
NIOSH	Xylene	1330-20-7	REL-TWA: 435 mg/m³ (100 ppm [up to 10 hr])
	Xylene	1330-20-7	15-Minute STEL: 655 mg/m³ (150 ppm)
	Xylene	1330-20-7	IDLH: 900 ppm
	Distillates (petroleum), hydrotreated light*	64742-47-8	REL-TWA: 350 mg/m ³ (up tp 10 hr [petroleum distillates, naphtha])
	Distillates (petroleum), hydrotreated light*	64742-47-8	Ceiling Limit: 1800 mg/m ³ ([15 min] petroleum distillates, naphtha)
	Distillates (petroleum), hydrotreated light*	64742-47-8	REL-TWA: 100 mg/m ³ (up to 10 hr [kerosene])
	Naphtha (petroleum), hydrotreated heavy*	64742-48-9	Ceiling Limit: 1800 mg/m ³ (petroleum distillates [15 min])
	Naphtha (petroleum), hydrotreated heavy*	64742-48-9	REL-TWA: 350 mg/m ³ (petroleum distallates [up tp 10 hr])
	Ethyl Benzene	100-41-4	REL-TWA: 435 mg/m ³ (100 ppm [10-hr])
	Ethyl Benzene	100-41-4	15-Minute STEL: 545 mg/m ³ (125 ppm)
	Ethyl Benzene	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	STEL: 560 mg/m ³ (150 ppm)
	Toluene	108-88-3	IDLH: 500 ppm
	Trimethylbenzene	25551-13-7	REL-TWA: 125 mg/m ³ (25 ppm)
	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	REL-TWA: 24 mg/m ³ (5 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
United States(California)	Xylene	1330-20-7	8-Hour TWA-PEL: 435 mg/m ³ (100 ppm)
	Xylene	1330-20-7	15-Minute STEL: 635 mg/m ³ (150 ppm)
	Xylene	1330-20-7	PEL Ceiling: 300 ppm
	Distillates (petroleum), hydrotreated light*	64742-47-8	8-Hour TWA-PEL: 1600 mg/m ³ (400 ppm [aliphatic hydrocarbons])

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Naphtha (petroleum), hydrotreated heavy*	64742-48-9	8-Hour TWA-PEL: 1600 mg/m ³ (400 ppm [petroleum distillates] - A single TWA does not sufficiently cover this broad category. The concentration of benzene and other aromatic hydrocarbons should also be considered.)
	Ethyl Benzene	100-41-4	8-Hour TWA-PEL: 22 mg/m ³ (5 ppm)
	Ethyl Benzene	100-41-4	15-Minute STEL: 130 mg/m ³ (30 ppm)
	Ethyl Benzene	100-41-4	REL: 2000 ug/m ³ (chronic inhalation)
	Toluene	108-88-3	8-Hour TWA-PEL: 37 mg/m ³ (10 ppm)
	Toluene	108-88-3	15-Minute STEL: 560 mg/m ³ (150 ppm)
	Toluene	108-88-3	Ceiling Limit: 500 ppm
	Toluene	108-88-3	REL: 37000 ug/m³ (Acute inhalation)
	Toluene	108-88-3	REL: 300 ug/m ³ (Chronic inhalation)
	Trimethylbenzene	25551-13-7	8-Hour TWA-PEL: 125 mg/m ³ (25 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m ³ (20 ppm)
	2-Butoxyethanol	111-76-2	REL: 4700 ug/m ³ (Acute inhalation)
	2-Butoxyethanol	111-76-2	REL: 164 ug/m ³ (8-hour Inhalation)
	2-Butoxyethanol	111-76-2	REL: 82 ug/m ³ (Chronic inhalation)
	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)

Biological Limit Values:

Country (Legal Basis)	Substance	ldentifi er	Determin ant	Specimen	Sampling time	Permissibl e limits
ACGIH	Xylene	1330-20- 7	Methylhipp uric acids	Creatinine in urine	End of shift.	1.5 g/g
	Ethyl Benzene	100-41-4	Sum of mandelic acid and phenylglyox ylic 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
	2-Butoxyethanol	111-76-2	Butoxyaceti c acid (with hydrolysis)	Creatinine in Urine	End of shift	200 mg/g

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Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

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:

For continuous contact we recommend nitrile gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified.

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:

Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Comply with the OSHA respirator regulations found in 29 CFR 1910.134. 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

Information on Basic Physical and Chemical Properties

Appearance	Clear, colorless liquid
Odor	Characteristic
Odor threshold	Not determined or not available.
рН	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)	27 °C (81 °F) - Tag Closed Cup
Evaporation rate	1 (Ethyl Ether)
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.

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Vapor pressure	Not determined or not available.
Vapor density	Relative: >1 (Air = 1.0)
Density	0.84 g/cm3 at 20 °C (68 °F)
Relative density	0.84 at 20 °C (68 °F) [water = 1]
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
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.

Incompatible Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

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

SECTION 11: Toxicological Information

Acute Toxicity

Assessment:

Harmful in contact with skin. Harmful if inhaled.

Product Data: No data available.

Name	Route	Result
Xylene	dermal	LD50 Rabbit: 1700 mg/kg
	inhalation	LC50 Rat: 5100 ppmV (4 h)
	oral	LD50 Rat: 3523 mg/kg
Distillates (petroleum),	oral	LD50 Rat: >5000 mg/kg
hydrotreated light*	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5.28 mg/L (4 hr [vapor])

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Name	Route	Result	
Naphtha (petroleum),	oral	LD50 Rat: 4820 mg/kg	
hydrotreated heavy*	dermal	LD50 Rabbit: >2000 mg/kg	
	inhalation	LC50 Rat: >5 mg/L (4 hr [vapor])	
Ethyl Benzene	inhalation	LC50 Rat: 17.8 mg/L (4 hr [vapor])	
	oral	LD50 Rat: 3500 mg/kg	
	dermal	LD50 Rabbit: 15,400 mg/kg	
Solvent naphtha (petroleum),	oral	LD50 Rat: >4800 mg/kg	
light arom.	dermal	LD50 Rabbit: >2000 mg/kg	
	inhalation	LC50 Rat: >4.96 mg/L (4 hr [vapor])	
Toluene	oral	LD50 Rat: 5580 mg/kg	
	dermal	LD50 Rabbit: 12,267 mg/kg	
	inhalation	LC50 Rat: 25.7 mg/L (4 hr [Vapor])	
Trimethylbenzene	oral	LD50 Rat: 8970 mg/kg	
	Dermal ATE	LD50 Rabbit: 1100 mg/kg	
2-Butoxyethanol	dermal	LD50 Rabbit: 220 mg/kg	
	inhalation	LC50 Rat: 450 ppmV (4 hr - Vapor)	
	Oral ATE	LD50 Rat: 1200 mg/kg (Annex VI to the CLP)	
	oral	LD50 Rat: 470 mg/kg	
1, 2, 4-Trimethylbenzene	inhalation	LC50 Rat: 10,200 mg/m ³ (4 hr [vapor])	
	oral	LD50 Rat: 6000 mg/kg	
	dermal	LD50 Rat: >3440 mg/kg	
Cumene	oral	LD50 Rat: 2260 mg/kg	
	dermal	LD50 Rabbit: > 3160 mg/kg	

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

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

Serious Eye Damage/Irritation

Assessment:

Causes serious eye irritation.

Product Data:

No data available.

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

Respiratory or Skin Sensitization

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

Product Data:

No data available.

Substance Data: No data available.

Carcinogenicity

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

Product Data: No data available.

Substance Data:

Name	Species	Result
Naphtha (petroleum), hydrotreated heavy*	Not applicable.	May cause cancer. Animals exposed to high levels of some petroleum products have developed liver and kidney tumors. Occupationally exposed people in the petroleum refining industry have an increased risk of skin cancer and leukemia.
Solvent naphtha (petroleum), light arom.	Not applicable.	May cause cancer. Animals exposed to high levels of some petroleum products have developed liver and kidney tumors. Occupationally exposed people in the petroleum refining industry have an increased risk of skin cancer and leukemia.

International Agency for Research on Cancer (IARC):

Name	Classification
Xylene	Group 3
Ethyl Benzene	Group 2B
Toluene	Group 3
2-Butoxyethanol	Group 3
Cumene	Group 2B

National Toxicology Program (NTP):

Name	Classification
Cumene	Reasonably anticipated to be human carcinogens

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

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

Product Data:

No data available.

Name	Result
Naphtha (petroleum), hydrotreated heavy*	May cause genetic defects.

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Name	Result
Solvent naphtha (petroleum), light arom.	May cause genetic defects.

Reproductive Toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
Toluene	Suspected of damaging the unborn child.

Specific Target Organ Toxicity (Single Exposure)

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

Product Data:

No data available.

Substance Data:

Name	Result
Toluene	May cause drowsiness or dizziness.
1, 2, 4-Trimethylbenzene	May cause respiratory irritation.
Cumene	May cause respiratory irritation to the upper respiratory tract via inhalation exposure.

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
Ethyl Benzene	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.

Name	Result
Distillates (petroleum), hydrotreated light*	May be fatal if swallowed and enters airways.
Naphtha (petroleum), hydrotreated heavy*	May be fatal if swallowed and enters airways.

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Name	Result
Ethyl Benzene	May be fatal if swallowed and enters airways.
Solvent naphtha (petroleum), light arom.	May be fatal if swallowed and enters airways.
Toluene	May be fatal if swallowed and enters airways.
1, 2, 4-Trimethylbenzene	May be fatal if swallowed and enters airways.
Cumene	May be fatal if swallowed and enters airways.

Information on Likely Routes of Exposure:

Inhalation; Ingestion; Skin contact; Eye contact

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

Refer to Section 4 of this SDS.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment:

Toxic to aquatic life.

Product Data: No data available.

Name	Result
Xylene	Fish LC50 Freshwater fish: 2.6 mg/L (96 h)
	Aquatic Invertebrates EC50 Daphnia magna: 1.8 mg/L (48 h)
	Aquatic Plants EC50 Freshwater algae: 3.2 mg/L (72 h)
Distillates (petroleum),	Fish LC50 Lepomis macrochirus: 2.2 mg/L (96 hr)
hydrotreated light*	Aquatic Invertebrates EC50 Daphnia magna: 1.4 mg/L (48 hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 6.7 mg/L (72 hr)
Naphtha (petroleum),	Fish LC50 Oncorhynchus mykiss: 10 mg/L (96 hr [LL50])
hydrotreated heavy*	Aquatic Invertebrates EC50 Daphnia magna: 4.5 mg/L (48 hr [EL50])
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 3.1 mg/L (72 hr [EL50])
Ethyl Benzene	Fish LC50 Menidia menidia: 5.1 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 1.8 - 2.4 mg/L (48 hr)
	Aquatic Plants EC50 Skeletonema costatum: 4.9 mg/L (72 hr)
Solvent naphtha (petroleum),	Fish LC50 Pimephales promelas: 8.2 mg/L (96 hr [LL50])
light arom.	Aquatic Invertebrates EC50 Daphnia magna: 4.5 mg/L (48 hr [EL50])
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 3.1 mg/L (72 hr [EL50])
Toluene	Fish LC50 Oncorhynchus kisutch: 5.5 mg/L (96 hr)
2-Butoxyethanol	Aquatic Invertebrates EC50 Daphnia magna: 1,550 mg/L (48 hr)
	Fish LC50 Oncorhynchus mykiss: 1,474 mg/L (96 hr)
1, 2, 4-Trimethylbenzene	Fish LC50 Pimephales promelas: 7.72 mg/L (96 hours)

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Name	Result
Cumene	Fish LC50 Cyprinodon variegatus: 4.7 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.14 mg/L (48 hr)
	Aquatic Plants EC50 Desmodesmus subspicatus: 1.29 mg/L (72 hr)

Chronic (Long-Term) Toxicity

Assessment:

Harmful to aquatic life with long lasting effects.

Product Data: No data available.

Substance Data:

Name	Result
Xylene	Fish NOEC Salmo gairdneri: >1.3 mg/L (56 d)
	Aquatic Invertebrates NOEC Ceriodaphnia dubia: 0.96 mg/L (7 d)
Distillates (petroleum), hydrotreated light*	Aquatic Invertebrates EC50 Daphnia magna: 0.81 mg/L (21 d)
Naphtha (petroleum), hydrotreated heavy*	Aquatic Invertebrates EC50 Daphnia magna: 10 mg/L (21 days [EL50])
Solvent naphtha (petroleum), light arom.	Aquatic Invertebrates EC50 Daphnia magna: 10 mg/L (21 d [EL50])
Toluene	Aquatic Plants NOEC Skeletonema costatum: 10 mg/L (72 hr)
	Fish NOEC Oncorhynchus kisutch: 1.39 mg/L (40 d)
	Aquatic Invertebrates NOEC Ceriodaphnia dubia: 0.74 mg/L (7 d)
2-Butoxyethanol	Fish NOEC Danio rerio: > 100 mg/L (21 d)
	Aquatic Invertebrates NOEC Daphnia magna: 100 mg/L (21 d)
Cumene	Fish NOEC D. rerio and P. promelas: 0.38 mg/L (28 d)
	Aquatic Invertebrates NOEC Daphnia magna: 0.35 mg/L (21 d)
	Aquatic Plants NOEC Desmodesmus subspicatus: 0.73 mg/L (72 h)

Persistence and Degradability

Product Data: No data available.

Name	Result
Xylene	Readily biodegradable in water.
Distillates (petroleum), hydrotreated light*	Substance is considered to be inherently biodegradable in water.
Naphtha (petroleum), hydrotreated heavy*	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Ethyl Benzene	Readily biodegradable in water (70-80% degradation after 28 days).
Solvent naphtha (petroleum), light arom.	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Toluene	Readily biodegradable in water (69% degradation [BOD/ThOD] after 5 days).
2-Butoxyethanol	Readily biodegradable (90.4% degradation after 28 days).

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Name	Result
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	Readily biodegradable in water (70% degradation in 20 days).

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Xylene	BCF: >8.1 - <25.9
Distillates (petroleum), hydrotreated light*	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Naphtha (petroleum), hydrotreated heavy*	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Solvent naphtha (petroleum), light arom.	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Toluene	Not expected to bioaccumulate (BCF: 90).
2-Butoxyethanol	Not expected to bioaccumulate (log Kow = 0.83).
1, 2, 4-Trimethylbenzene	Substance has the potential to bioaccumulate (calculated BCF: 243).
Cumene	Calculated BCF: 94.69 L/kg (low potential for bioconcentration is to be expected)

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Xylene	Moderately Mobile (Log Koc: 2.73)
Distillates (petroleum), hydrotreated light*	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Naphtha (petroleum), hydrotreated heavy*	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Solvent naphtha (petroleum), light arom.	This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Toluene	Moderately Mobile (Calculated Koc: 205).
1, 2, 4-Trimethylbenzene	Slightly mobile (calculated log Koc: 3.04).
Cumene	Moderately Mobile (Calculated log Koc: 2.946)

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:

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Xylene	The substance is not PBT.
Distillates (petroleum), hydrotreated light*	This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT at concentrations above 0.1%.
Naphtha (petroleum), hydrotreated heavy*	The substance is not PBT. This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.
Ethyl Benzene	This substance is not PBT.
Solvent naphtha (petroleum), light arom.	The substance is not PBT. This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.
2-Butoxyethanol	This substance is not PBT.
1, 2, 4-Trimethylbenzene	This substance is not PBT.
Cumene	Substance is not PBT.
vPvB assessment:	
Xylene	The substance is not vPvB.
Distillates (petroleum), hydrotreated light*	This substance is a UVCB and does not contain constituents included in the SVHC candidate list as vPvB at concentrations above 0.1%.
Naphtha (petroleum), hydrotreated heavy*	The substance is not vPvB. This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.
Ethyl Benzene	This substance is not vPvB.
Solvent naphtha (petroleum), light arom.	The substance is not vPvB. This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.
2-Butoxyethanol	This substance is not vPvB.
1, 2, 4-Trimethylbenzene	This substance is not vPvB.
Cumene	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	UN1993
UN Proper Shipping Name	Flammable Liquid, N.O.S. (Xylene, Ethyl Benzene)
UN Transport Hazard Class(es)	3
Packing Group	111
Environmental Hazards	None

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Special Precautions for User	None
Passenger Air/Rail	60 L
Cargo Aircraft Only	220 L
Stowage Category	A

International Maritime Dangerous Goods (IMDG)

UN Number	UN1993
UN Proper Shipping Name	Flammable Liquid, N.O.S. (Xylene, Ethyl Benzene)
UN Transport Hazard Class(es)	3
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None
EmS Number	F-E, S-E
Stowage Category	A
Excepted Quantities	E1
Limited Quantity	5 L

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

UN Number	UN1993
UN Proper Shipping Name	Flammable Liquid, N.O.S. (Xylene, Ethyl Benzene)
UN Transport Hazard Class(es)	3
	3
Packing Group	111
Environmental Hazards	None
Special Precautions for User	None
ERG Code	3L
Excepted Quantities	E1
Passenger and Cargo	60 L
Cargo Aircraft Only	220 L
Limited Quantity	10 L

SECTION 15: Regulatory Information

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:

1330-20-7	Xylene	Listed
100-41-4	Ethyl Benzene	Listed

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108-88-3	Toluene	Listed
111-76-2	2-Butoxyethanol	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed

CERCLA:

1330-20-7	Xylene	Listed	100 lb
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed	100 lb
64742-48-9	Naphtha (petroleum), hydrotreated heavy*	Listed	100 lb
100-41-4	Ethyl Benzene	Listed	1000 lb
108-88-3	Toluene	Listed	1000 lb
111-76-2	2-Butoxyethanol	Listed	N/A
98-82-8	Cumene	Listed	5000 lb

RCRA:

1330-20-7	Xylene	Listed	U239
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed	D001
64742-48-9	Naphtha (petroleum), hydrotreated heavy*	Listed	D001
100-41-4	Ethyl Benzene	Listed	F003, D001
108-88-3	Toluene	Listed	U220
98-82-8	Cumene	Listed	U055

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

1330-20-7	Xylene	Listed
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed
100-41-4	Ethyl Benzene	Listed
108-88-3	Toluene	Listed
25551-13-7	Trimethylbenzene	Listed
111-76-2	2-Butoxyethanol	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed

New Jersey Right to Know:

1330-20-7	Xylene	Listed
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed
100-41-4	Ethyl Benzene	Listed
108-88-3	Toluene	Listed
25551-13-7	Trimethylbenzene	Listed
111-76-2	2-Butoxyethanol	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed

New York Right to Know:

1330-20-7	Xylene	Listed
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed

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64742-48-9	Naphtha (petroleum), hydrotreated heavy*	Listed
100-41-4	Ethyl Benzene	Listed
108-88-3	Toluene	Listed
25551-13-7	Trimethylbenzene	Listed
111-76-2	2-Butoxyethanol	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed

Pennsylvania Right to Know:

1330-20-7	Xylene	Listed
64742-47-8	Distillates (petroleum), hydrotreated light*	Listed
64742-48-9	Naphtha (petroleum), hydrotreated heavy*	Listed
100-41-4	Ethyl Benzene	Listed
108-88-3	Toluene	Listed
25551-13-7	Trimethylbenzene	Listed
111-76-2	2-Butoxyethanol	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed

California Proposition 65:

WARNING: This product can expose you to chemicals including Ethyl Benzene, Cumene, Naphthalene and 1,4-Dioxane; 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.

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

Additional information:

This product contains the following additional ingredients listed on Massachusetts, New Jersey, New York and Pennsylvania Right to Know lists: Naphthalene (CAS 91-20-3), 1,4-dioxane (CAS 123-91-1), Benzene (CAS 71-43-2), Ethylene oxide (CAS 75-21-8), and Nonylphenol, branched, ethoxylated (CAS 68412-54-4).

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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Revision Notes:

Revision Date	Notes
2022-01-31	Updated formula, consequently updating classification and occupational exposure limits.

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End of Safety Data Sheet