Bead Breaker

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
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SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Trade name	:	Bead Breaker
Product code	:	734, 734Q, 734-5G, 734-55G

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Tire sealant
Restrictions on use	:	No additional information available

1.3. Supplier

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

1.4. Emergency telephone number

Emergency number	:	CHEMTREC Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1-703-527-3887 Local: +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Acute toxicity (inhalation) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Aspiration hazard Category 1	H304	May be fatal if swallowed and enters airways
Hazardous to the aquatic environment – Chronic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) :
H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER, a doctor.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of § 1910.1200

Name	Product identifier	%	GHS US classification
Xylene	CAS-No.: 1330-20-7	50 - < 70	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
Distillates (petroleum), hydrotreated light	CAS-No.: 64742-47-8	20 - < 40	Asp. Tox. 1, H304
Naphtha (petroleum), hydrotreated heav	CAS-No.: 64742-48-9	20 - < 40	Asp. Tox. 1, H304
Alcohols, C12-14-secondary, ethoxylated	CAS-No.: 84133-50-6	5 - < 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318
Solvent naphtha (petroleum), light arom.	CAS-No.: 64742-95-6	4 - < 10	Asp. Tox. 1, H304
1,2,4-trimethylbenzene	CAS-No.: 95-63-6	1 - < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
Trimethylbenzene	CAS-No.: 25551-13-7	1 - < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Name	Product identifier	%	GHS US classification
2-butoxyethanol	CAS-No.: 111-76-2	1 - < 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
1,3,5-trimethylbenzene	CAS-No.: 108-67-8	0.1 - < 1.5	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411
1,2,3-trimethylbenzene	CAS-No.: 526-73-8	< 0.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Cumene	CAS-No.: 98-82-8	< 0.5	Flam. Liq. 3, H226 Carc. 1B, H350 Asp. Tox. 1, H304 STOT SE 3, H335 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact ophthalmologist immediately.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting/risk of damage to lungs exceeds poisoning risk. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Harmful if inhaled. Headache. Cough. Shortness of breath. Difficulty in breathing.

Symptoms/effects after skin contact : Causes skin irritation. Rednesses. Itching. Swelling.

Symptoms/effects after eye contact : Causes serious eye damage. Can cause blindness. Pain. Blurred vision. redness, itching, tears.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Ingestion may cause nausea and vomiting. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Carbon dioxide. Water spray. Foam. Use extinguishing agent suitable for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. Heating will cause a rise in pressure with a risk of bursting. In case of fire and/or explosion do not breathe fumes.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate the danger area. Eliminate all ignition sources if safe to do so. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No flames, no sparks. Eliminate all sources of ignition. Use special care to avoid static electric charges. Avoid all contact with skin, eyes, or clothing.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapors. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Use non-sparking tools. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak, if possible without risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Remove ignition sources. Caution : this product can cause the floor to be slippery.

Methods for cleaning up : Move containers from spill area. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters. Use non-sparking tools.

Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Do not breathe vapors. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharge. Use explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not re-use container for any purpose.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Strong oxidizers. Store in a dry place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food, drink and animal feedingstuffs. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation. Do not store in unlabelled containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Xylene (1330-20-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; hematologic eff; ototoxycity (for mixtures containing p-xylene); CNS impair. Notations: OTO (for mixtures containing p-xylene); A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
Local name	Xylenes (technical or commercial grade)
BEI (BLV)	0.3 g/g Kreatinin Parameter: Methylhippuric acids (The determinants refer to the total of all isomers of methylhippuric acids) - Medium: urine - Sampling time: End of shift
Remark	Commercial or technical grade xylenes consist of mixtures of isomers and significant amounts of ethyl benzene as indicated under "Properties." Because ethyl benzene is known to reduce the metabolism of xylenes to methylhippuric acids, the BEI applies to technical or commercial grades of xylenes only. The determinants refer to the total of all isomers of methylhippuric acids
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL TWA	435 mg/m³

Xylene (1330-20-7)	
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

2-butoxyethanol (111-76-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	2-Butoxyethanol (EGBE)
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
Local name	2-Butoxyethanol
BEI (BLV)	200 mg/g Kreatinin Parameter: Butoxyacetic acid (BAA) (with hydrolysis) - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	2-Butoxyethanol
OSHA PEL TWA	240 mg/m³
	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

1,2,3-trimethylbenzene (526-73-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,2,3-Trimethyl benzene
ACGIH OEL TWA	10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff
Regulatory reference	ACGIH 2024

1,3,5-trimethylbenzene (108-67-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,3,5-Trimethyl benzene
ACGIH OEL TWA	10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff
Regulatory reference	ACGIH 2024

Cumene (98-82-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Cumene
ACGIH OEL TWA	5 ppm
Remark (ACGIH)	TLV® Basis: URT adenoma; neurological eff. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024

Cumene (98-82-8)	
USA - OSHA - Occupational Exposure Limits	
Local name	Cumene
OSHA PEL TWA	245 mg/m³
	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

1,2,4-trimethylbenzene (95-63-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,2,4-Trimethyl benzene
ACGIH OEL TWA	10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

Trimethylbenzene (25551-13-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Trimethyl benzene, mixed isomers
ACGIH OEL TWA	10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions.

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Ensure exposure is below occupational exposure limits (where available). Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:
Chemical resistant gloves (according to NIOSH standard). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Respiratory protection:
An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits. All respirators must conform to specifications for efficiency and performance indicated by OSHA Standard 29 CFR 1910.134 and NIOSH Standards

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	clear.
Color	:	Colorless
Odor	:	Characteristic
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	27 °C (81 °F, Closed cup)
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	1
Flammability (solid, gas)	:	Flammable liquid and vapor.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	> 1
Relative density	:	0.84 (20 °C, 68 °F)
Density	:	0.84 g/cm³ (20 °C, 68 °F)
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	< 21 mm²/s
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor. Can form explosive mixtures with air. Heating may cause a fire or explosion.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidising agents.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

Bead Breaker	
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg
LD50 dermal rabbit	1700 mg/kg
LC50 Inhalation - Rat [ppm]	5100 ppmV/4h
ATE US (oral)	3523 mg/kg body weight
ATE US (dermal)	1700 mg/kg body weight
ATE US (gases)	5100 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

2-butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	220 mg/kg
LC50 Inhalation - Rat [ppm]	450 ppmV/4h
ATE US (oral)	470 mg/kg body weight
ATE US (dermal)	220 mg/kg body weight
ATE US (gases)	450 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Alcohols, C12-14-secondary, ethoxylated (84133-50-6)	
ATE US (oral)	500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

1,2,4-trimethylbenzene (95-63-6)	
LD50 oral rat	6000 mg/kg
LD50 dermal rabbit	> 3440 mg/kg
LC50 Inhalation - Rat	10200 mg/m³
ATE US (oral)	6000 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	10.2 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Trimethylbenzene (25551-13-7)	
LD50 dermal rabbit	1100 nl/kg
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight

Solvent naphtha (petroleum), light arom. (64742-95-6)	
LD50 oral rat	> 4800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 4.96 mg/l/4h

Distillates (petroleum), hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 5.28 mg/l/4h

Naphtha (petroleum), hydrotreated heav (64742-48-9)	
LD50 oral rat	> 4820 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

2-butoxyethanol (111-76-2)	
IARC group	3 - Not classifiable

Cumene (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

1,3,5-trimethylbenzene (108-67-8)	
STOT-single exposure	May cause respiratory irritation.

Cumene (98-82-8)	
STOT-single exposure	May cause respiratory irritation.

1,2,4-trimethylbenzene (95-63-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic : < 21 mm²/s
Symptoms/effects after inhalation : Harmful if inhaled. Headache. Cough. Shortness of breath. Difficulty in breathing.
Symptoms/effects after skin contact : Causes skin irritation. Rednesses. Itching. Swelling.
Symptoms/effects after eye contact : Causes serious eye damage. Can cause blindness. Pain. Blurred vision. redness, itching, tears.
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Ingestion may cause nausea and vomiting. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.
Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects. Do not allow product to spread into the environment.

Xylene (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l
EC50 - Crustacea [1]	1.8 mg/l Daphnia magna
EC50 72h - Algae [1]	3.2 mg/l

2-butoxyethanol (111-76-2)	
NOEC chronic fish	> 100 mg/l 21d, Danio rerio
NOEC chronic crustacea	100 mg/l 21d, Daphnia magna

1,2,4-trimethylbenzene (95-63-6)	
LC50 - Fish [1]	7.72 mg/l Pimephales promelas

Solvent naphtha (petroleum), light arom. (64742-95-6)	
NOEC chronic crustacea	0.81 mg/l 21d, Daphnia magna

Distillates (petroleum), hydrotreated light (64742-47-8)	
LC50 - Fish [1]	2.2 mg/l Lepomis macrochirus
EC50 - Crustacea [1]	1.4 mg/l Daphnia magna
EC50 72h - Algae [1]	6.7 mg/l Pseudokirchneriella subcapitata

Naphtha (petroleum), hydrotreated heav (64742-48-9)	
NOEC chronic crustacea	10 mg/l 21d, Daphnia magna

12.2. Persistence and degradability

Bead Breaker	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Bead Breaker	
Bioaccumulative potential	No data available concerning bioaccumulation.
Xylene (1330-20-7)	
Bioconcentration factor (BCF REACH)	>8.1-<25.9
2-butoxyethanol (111-76-2)	
Partition coefficient n-octanol/water (Log Kow)	0.83
1,2,4-trimethylbenzene (95-63-6)	
Bioconcentration factor (BCF REACH)	94.69

12.4. Mobility in soil

Bead Breaker	
Ecology - soil	No additional information available.
Xylene (1330-20-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.73
1,2,4-trimethylbenzene (95-63-6)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.04

12.5. Other adverse effects

Other adverse effects : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not dispose of the packaging without first carrying out the necessary cleaning. Do not pierce or burn, even after use.
Additional information : Flammable vapors may accumulate in the container.
Ecological information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1993

UN-No. (TDG) : UN1993
UN-No. (IMDG) : 1993
UN-No. (IATA) : 1993

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Xylene)
Proper Shipping Name (TDG) : FLAMMABLE LIQUID, N.O.S. (Xylene)
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S. (Xylene)
Proper Shipping Name (IATA) : Flammable liquid, n.o.s. (Xylene)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3

TDG

Transport hazard class(es) (TDG) : 3
Hazard labels (TDG) : 3

IMDG

Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3

IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

14.4. Packing group

Packing group (DOT) : III
Packing group (TDG) : III
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT)	:	UN1993
DOT Special Provisions (49 CFR 172.102)	:	B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG)	:	UN1993
TDG Special Provisions	:	16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS,150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101
Explosive Limit and Limited Quantity Index	:	5 L
Excepted quantities (TDG)	:	E1

Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	60 L
Emergency Response Guide (ERG) Number	:	128

IMDG

Special provision (IMDG)	:	223, 274, 955
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP01, P001
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP29
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG)	:	A

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y344
PCA limited quantity max net quantity (IATA)	:	10L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
Special provision (IATA)	:	A3
ERG code (IATA)	:	3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
Xylene	CAS-No. 1330-20-7	50 - < 70%
Cumene	CAS-No. 98-82-8	< 0.5%
1,2,4-trimethylbenzene	CAS-No. 95-63-6	1 - < 5%

Xylene (1330-20-7)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

Cumene (98-82-8)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

Xylene (1330-20-7)

Listed on the Canadian DSL (Domestic Substances List)

2-butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

Alcohols, C12-14-secondary, ethoxylated (84133-50-6)

Listed on the Canadian DSL (Domestic Substances List)

1,2,3-trimethylbenzene (526-73-8)

Listed on the Canadian DSL (Domestic Substances List)

1,3,5-trimethylbenzene (108-67-8)

Listed on the Canadian DSL (Domestic Substances List)

Cumene (98-82-8)

Listed on the Canadian DSL (Domestic Substances List)

1,2,4-trimethylbenzene (95-63-6)

Listed on the Canadian DSL (Domestic Substances List)

Trimethylbenzene (25551-13-7)

Listed on the Canadian DSL (Domestic Substances List)

Solvent naphtha (petroleum), light arom. (64742-95-6)

Listed on the Canadian DSL (Domestic Substances List)

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List)

Naphtha (petroleum), hydrotreated heav (64742-48-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Xylene (1330-20-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

2-butoxyethanol (111-76-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Alcohols, C12-14-secondary, ethoxylated (84133-50-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

1,3,5-trimethylbenzene (108-67-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

1,2,4-trimethylbenzene (95-63-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Trimethylbenzene (25551-13-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Solvent naphtha (petroleum), light arom. (64742-95-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Distillates (petroleum), hydrotreated light (64742-47-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Naphtha (petroleum), hydrotreated heav (64742-48-9)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

⚠ **WARNING:** This product can expose you to Cumene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Data sources : Supplier's safety documents.
Training advice : Training staff on good practice.

Full text of H-phrases	
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin

Full text of H-phrases	
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

Abbreviations and acronyms	
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.