

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.01.2022

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**MALI19H**

## SECTION 1: Identification

### Product Identifier

**Product Name:** MALI19H

### 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

#### Emergency Telephone Number:

**United States**

Chemtrec

800-424-9300 (24/7)

## SECTION 2: Hazard(s) Identification

### GHS Classification:

Flammable liquids, category 3

Skin irritation, category 2

Eye irritation, category 2B

Carcinogenicity, category 2

Specific target organ toxicity - single exposure, 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 1

Aspiration hazard, category 1

### Label elements

#### Hazard Pictograms:



**Signal Word:** Danger

### Hazard statements:

H226 Flammable liquid and vapor

H315 Causes skin irritation

H320 Causes eye irritation

H351 Suspected of causing cancer

H371 May cause damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H372 Causes damage to organs through prolonged or repeated exposure

H304 May be fatal if swallowed and enters airways

### Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P233 Keep container tightly closed

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P240 Ground/bond container and receiving equipment  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment  
P242 Use only non-sparking tools  
P243 Take precautionary measures against static discharge  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P264 Wash 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/fume/gas/mist/vapors/spray  
P270 Do not eat, drink or smoke when using this product  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 Use only outdoors or in a well-ventilated area  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P370+P378 In case of fire: Use agents recommended in section 5 to extinguish  
P302+P352 IF ON SKIN: Wash with plenty of water  
P321 Specific treatment (see supplemental first aid instructions on this 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/attention  
P308+P313 IF exposed or concerned: Get medical advice/attention  
P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/ ...  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P312 Call a POISON CENTER/doctor if you feel unwell  
P314 Get medical advice/attention if you feel unwell  
P331 Do NOT induce vomiting  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor  
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/container in accordance with local regulations

**Hazards Not Otherwise Classified:** None

## SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 95-63-6	1, 2, 4-Trimethylbenzene	6.3-21.7
CAS Number: N/A	Other Aromatic Hydrocarbons (C9 - C10)	<15.5
CAS Number: 620-14-4	3-ethyltoluene	4.2-12.4
CAS Number: 611-14-3	2-ethyltoluene	1.68-7.44
CAS Number: 108-67-8	Mesitylene	2.1-6.2

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CAS Number: 622-96-8	4-ethyltoluene	1.26-6.2
CAS Number: 526-73-8	1,2,3-trimethylbenzene	1.26-5.58
CAS Number: 103-65-1	Propylbenzene	1.26-4.34
CAS Number: 109-73-9	Butan-1-amine	2-4
CAS Number: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	<2.7
CAS Number: 25155-15-1	Cymene	0.21-2.48
CAS Number: 98-82-8	Cumene	0.042-1.24
CAS Number: 1330-20-7	Xylene	0.042-1.24
CAS Number: 91-20-3	Naphthalene	0.036-0.27

**Additional Information:** None

## 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 experiencing respiratory symptoms, 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.

#### 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

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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 cause damage to organs. Effects are dependent on exposure (dose, concentration, contact time).

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:

Suspected of causing cancer. Effects are dependent on exposure (dose, concentration, contact time).

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

Symptoms of pulmonary edema may be delayed.

## Immediate Medical Attention and Special Treatment

### Specific Treatment:

Skin/eye burns require immediate treatment.

If exhibiting symptoms of exposure, seek prompt medical attention.

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, CO<sub>2</sub>, 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)

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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.

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. 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

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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:**

Country (Legal Basis)	Substance	Identifier	Permissible concentration
NIOSH	1, 2, 4-Trimethylbenzene	95-63-6	REL-TWA: 125 mg/m <sup>3</sup> (25 ppm [up to 10 hr])
	Cumene	98-82-8	REL-TWA: 245 mg/m <sup>3</sup> (50 ppm [10-hour workday])
	Cumene	98-82-8	IDLH: 900 ppm
	1,2,3-trimethylbenzene	526-73-8	REL: 125 mg/m <sup>3</sup> ([for up to a 10-hour workday during a 40-hour workweek])
	1,2,3-trimethylbenzene	526-73-8	REL: 25 ppm ([for up to a 10-hour workday during a 40-hour workweek])
	Xylene	1330-20-7	REL-TWA: 435 mg/m <sup>3</sup> (100 ppm [up to 10 hr])
	Xylene	1330-20-7	15-Minute STEL: 655 mg/m <sup>3</sup> (150 ppm)
	Xylene	1330-20-7	IDLH: 900 ppm
	Mesitylene	108-67-8	REL: 25 ppm (10-hour workday)
	Mesitylene	108-67-8	REL: 125 mg/m <sup>3</sup> (10-hour workday)
	Solvent naphtha (petroleum), heavy arom.	64742-94-5	REL-TWA: 100 mg/m <sup>3</sup> (up to 10 hr)
	Naphthalene	91-20-3	REL-TWA: 50 mg/m <sup>3</sup> ([10 ppm] 10-hour workday)
	Naphthalene	91-20-3	15-Minute STEL: 75 mg/m <sup>3</sup> (15 ppm)
	Naphthalene	91-20-3	IDLH: 250 ppm
	Butan-1-amine	109-73-9	IDLH: 300 ppm
Butan-1-amine	109-73-9	Ceiling Limit: 15 mg/m <sup>3</sup> (5 ppm)	
ACGIH	1, 2, 4-Trimethylbenzene	95-63-6	TLV-TWA: 10 ppm (8 hr)
	Cumene	98-82-8	TLV-TWA: 5 ppm (8 hr)
	1,2,3-trimethylbenzene	526-73-8	8-Hour TWA: 25 ppm
	1,2,3-trimethylbenzene	526-73-8	8-Hour TWA: 10 ppm
	Xylene	1330-20-7	8-Hour TWA: 100 ppm
	Xylene	1330-20-7	15-Minute STEL: 150 ppm
	Mesitylene	108-67-8	8-Hour TWA: 25 ppm
	Solvent naphtha (petroleum), heavy arom.	64742-94-5	8-Hour TWA: 200 mg/m <sup>3</sup> (Kerosene Jet fuels, as total hydrocarbon vapor)
	Naphthalene	91-20-3	8-Hour TWA: 52 mg/m <sup>3</sup> (10 ppm)
	Butan-1-amine	109-73-9	Ceiling Limit: 5 ppm

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	1, 2, 4-Trimethylbenzene	95-63-6	8-Hour TWA: 125 mg/m <sup>3</sup> (25 ppm)
	Cumene	98-82-8	8-Hour TWA-PEL: 245 mg/m <sup>3</sup> (50 ppm)
	1,2,3-trimethylbenzene	526-73-8	8-Hour TWA: 25 ppm
	Xylene	1330-20-7	8-Hour TWA-PEL: 435 mg/m <sup>3</sup> (100 ppm)
	Mesitylene	108-67-8	8-Hour TWA: 25 ppm
	Mesitylene	108-67-8	8-Hour TWA: 125 mg/m <sup>3</sup>
	Naphthalene	91-20-3	8-Hour TWA: 50 mg/m <sup>3</sup> (10 ppm)
	Naphthalene	91-20-3	8-Hour TWA: 50 mg/m <sup>3</sup>
	Butan-1-amine	109-73-9	Ceiling Limit: 15 mg/m <sup>3</sup> (5 ppm)
United States(California)	1, 2, 4-Trimethylbenzene	95-63-6	8-Hour TWA: 125 mg/m <sup>3</sup> (25 ppm)
	Cumene	98-82-8	8-Hour TWA: 245 mg/m <sup>3</sup> (50 ppm)
	1,2,3-trimethylbenzene	526-73-8	8-Hour TWA: 25 ppm
	Xylene	1330-20-7	8-Hour TWA-PEL: 435 mg/m <sup>3</sup> (100 ppm)
	Xylene	1330-20-7	15-Minute STEL: 635 mg/m <sup>3</sup> (150 ppm)
	Xylene	1330-20-7	PEL Ceiling: 300 ppm
	Mesitylene	108-67-8	8-Hour TWA: 25 ppm
	Naphthalene	91-20-3	8-Hour TWA-PEL: 0.5 mg/m <sup>3</sup> (0.1 ppm)
	Butan-1-amine	109-73-9	Ceiling Limit: 15 mg/m <sup>3</sup> (5 ppm)

### Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Xylene	1330-20-7	Methylhippuric acids	Creatinine in urine	End of shift.	1.5 g/g
	Naphthalene	91-20-3	1-Naphthol, with hydrolysis + 2-Naphthol, with hydrolysis	None	End of shift.	

### 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:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected

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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. 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

<b>Appearance</b>	Clear, amber liquid
<b>Odor</b>	Characteristic solvent odor
<b>Odor threshold</b>	Not determined or available
<b>pH</b>	Not determined or available
<b>Melting point/freezing point</b>	Not determined or available
<b>Initial boiling point/range</b>	Not determined or available
<b>Flash point (closed cup)</b>	>128F
<b>Evaporation rate</b>	Not determined or available
<b>Flammability (solid, gas)</b>	Not determined or available
<b>Upper flammability/explosive limit</b>	Not determined or available
<b>Lower flammability/explosive limit</b>	Not determined or available
<b>Vapor pressure</b>	Not determined or available
<b>Vapor density</b>	Not determined or available
<b>Density</b>	Not determined or available
<b>Relative density</b>	0.84 - 0.92
<b>Solubilities</b>	Not determined or available
<b>Partition coefficient (n-octanol/water)</b>	Not determined or available
<b>Auto/Self-ignition temperature</b>	Not determined or available
<b>Decomposition temperature</b>	Not determined or available
<b>Dynamic viscosity</b>	Not determined or available
<b>Kinematic viscosity</b>	<20mm <sup>2</sup> /s @ 104°F
<b>Explosive properties</b>	Not determined or available
<b>Oxidizing properties</b>	Not determined or available

## SECTION 10: Stability and Reactivity

**Reactivity:**



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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:

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
1, 2, 4-Trimethylbenzene	inhalation	LC50 Rat: 10,200 mg/m <sup>3</sup> (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
Xylene	dermal	LD50 Rabbit: 1700 mg/kg
	inhalation	LC50 Rat: 5100 ppmV (4 h)
	oral	LD50 Rat: 3523 mg/kg
2-ethyltoluene	oral	LD50 Rat: 5000 mg/kg
	inhalation	LC50 Mouse: 54,000 mg/m <sup>3</sup> (4 Hr)
Mesitylene	oral	LD50 Rat: 6000 mg/kg
	inhalation	LC50 Rat: 10200 mg/m <sup>3</sup> (4 h)
Solvent naphtha (petroleum), heavy arom.	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5.28 mg/L (4 hr Vapor)
Naphthalene	oral	LD50 Rat: 490 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >0.4 mg/L (4 h (Vapor))
Butan-1-amine	oral	LD50 Rat: 365.7 mg/kg
	dermal	LD50 Rabbit: > 1110 mg/kg
	inhalation	LC50 Rat: 3.7 mg/L (4 hr [vapor])

### Skin Corrosion/Irritation

#### Assessment:

Causes skin irritation.

#### Product Data:

No data available.

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## Substance Data:

Name	Result
1, 2, 4-Trimethylbenzene	Causes skin irritation.
1,2,3-trimethylbenzene	Causes skin irritation.
Xylene	Causes skin irritation.
Mesitylene	Causes skin irritation.
Butan-1-amine	Causes severe skin burns.

## Serious Eye Damage/Irritation

### Assessment:

Causes eye irritation.

### Product Data:

No data available.

### Substance Data:

Name	Result
1, 2, 4-Trimethylbenzene	Causes serious eye irritation.
1,2,3-trimethylbenzene	Causes serious eye irritation.
2-ethyltoluene	Causes serious eye irritation.
Mesitylene	Causes serious eye irritation.
Butan-1-amine	Causes serious eye damage.

## 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:

Suspected of causing cancer.

**Product Data:** No data available.

### Substance Data:

Name	Species	Result
Naphthalene		Suspected of causing cancer. Animal studies indicate an increased rate of respiratory tumors via inhalation.

## International Agency for Research on Cancer (IARC):

Name	Classification
1, 2, 4-Trimethylbenzene	Not Applicable
Cumene	Group 2B
1,2,3-trimethylbenzene	Not Applicable
Xylene	Group 3
Mesitylene	Not Applicable
Cymene	Not Applicable
Solvent naphtha (petroleum), heavy arom.	Not Applicable
Naphthalene	Group 2B

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Name	Classification
Butan-1-amine	Not Applicable

## National Toxicology Program (NTP):

Name	Classification
1, 2, 4-Trimethylbenzene	Not Applicable
Cumene	Reasonably anticipated to be human carcinogens
1,2,3-trimethylbenzene	Not Applicable
Xylene	Not Applicable
Mesitylene	Not Applicable
Cymene	Not Applicable
Solvent naphtha (petroleum), heavy arom.	Not Applicable
Naphthalene	Reasonably anticipated to be human carcinogens
Butan-1-amine	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

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

### Product Data:

No data available.

### Substance Data:

Name	Result
2-ethyltoluene	Suspected of damaging fertility or the unborn child.

## Specific Target Organ Toxicity (Single Exposure)

### Assessment:

May cause damage to organs.

May cause respiratory irritation.

May cause drowsiness or dizziness.

### Product Data:

No data available.

### Substance Data:

Name	Result
1, 2, 4-Trimethylbenzene	May cause respiratory irritation.
Cumene	May cause respiratory irritation to the upper respiratory tract via inhalation exposure.
Mesitylene	May cause respiratory irritation.
Propylbenzene	May cause respiratory irritation.
Butan-1-amine	May cause respiratory irritation.

## Specific Target Organ Toxicity (Repeated Exposure)

### Assessment:

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Causes damage to organs through prolonged or repeated exposure.

**Product Data:**

No data available.

**Substance Data:** No data available.

**Aspiration toxicity**

**Assessment:**

May be fatal if swallowed and enters airways.

**Product Data:**

No data available.

**Substance Data:**

Name	Result
1, 2, 4-Trimethylbenzene	May be fatal if swallowed and enters airways.
Cumene	May be fatal if swallowed and enters airways.
Mesitylene	Maybe fatal if swallowed and enters airways.
Propylbenzene	May be fatal if swallowed and enters airways.
Cymene	May be fatal if swallowed and enters airways.
4-ethyltoluene	May be fatal if swallowed and enters airways.
Solvent naphtha (petroleum), heavy arom.	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
1, 2, 4-Trimethylbenzene	Fish LC50 Pimephales promelas: 7.72 mg/L (96 hours)
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 Desmodismus subspicatus: 1.29 mg/L (72 hr)
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)
Mesitylene	Fish LC50 Carassius auratus: 12.52 mg/L (96 hours)
Solvent naphtha (petroleum), heavy arom.	Fish LC50 Oncorhynchus mykiss: 2 mg/L (96 hr)
	Aquatic Plants EC50 Freshwater algae: 1 mg/L (48 ht)
Naphthalene	Fish LC50 Oncorhynchus mykiss: 1.6 mg/L (96 h)
	Aquatic Invertebrates EC50 Daphnia magna: 2.16 mg/L (48 h)

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Name	Result
Butan-1-amine	Fish LC50 <i>Lepomis macrochirus</i> : 32 mg/L (96 hr)
	Aquatic Invertebrates EC50 <i>Ceriodaphnia dubia</i> : 8.3 mg/L (48 hr)
	Aquatic Plants EC50 <i>Desmodemus subspicatus</i> : 5.6 mg/L (48 hr)

## Chronic (Long-Term) Toxicity

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

**Product Data:** No data available.

### Substance Data:

Name	Result
Cumene	Fish NOEC <i>D. rerio</i> and <i>P. promelas</i> : 0.38 mg/L (28 d)
	Aquatic Invertebrates NOEC <i>Daphnia magna</i> : 0.35 mg/L (21 d)
	Aquatic Plants NOEC <i>Desmodemus subspicatus</i> : 0.73 mg/L (72 h)
Xylene	Fish NOEC <i>Salmo gairdneri</i> : >1.3 mg/L (56 d)
	Aquatic Invertebrates NOEC <i>Ceriodaphnia dubia</i> : 0.96 mg/L (7 d)
Mesitylene	Aquatic Invertebrates NOEC <i>Daphnia magna</i> : 0.4 mg/L (21 days)
Naphthalene	Fish NOEC <i>Oncorhynchus mykiss</i> : 0.11 mg/L (4 d)
	Aquatic Invertebrates NOEC Estuarine copepod: 0.05 mg/L (10 d)

## Persistence and Degradability

**Product Data:** No data available.

### Substance Data:

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).
Xylene	Readily biodegradable in water.
Mesitylene	Readily biodegradable but failing 10-day window.
Solvent naphtha (petroleum), heavy arom.	Readily to inherently biodegradable.
Naphthalene	Inherently degradable.
Butan-1-amine	This substance is readily biodegradable in water (85% degradation after 14 days, O <sub>2</sub> consumption).

## Bioaccumulative Potential

**Product Data:** No data available.

### Substance Data:

Name	Result
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)
Xylene	BCF: >8.1 - <25.9
Mesitylene	Substance has low bioaccumulation potential (BCF: 342, Log <i>k<sub>ow</sub></i> : 3.42).
Naphthalene	Low bioaccumulation potential.
Butan-1-amine	Accumulation in organisms is not to be expected (BCF: 3.2).

## Mobility in Soil

**Product Data:** No data available.

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## Substance Data:

Name	Result
1, 2, 4-Trimethylbenzene	Slightly mobile (calculated log Koc: 3.04).
Cumene	Moderately Mobile (Calculated log Koc: 2.946)
Xylene	Moderately Mobile (Log Koc: 2.73)
Naphthalene	Adsorption to soil materials to a moderate extent.
Butan-1-amine	This substance is mobile; therefore, adsorption to soil is not expected (Koc: 43.2 L/kg).

## 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:

1, 2, 4-Trimethylbenzene	This substance is not PBT.
Cumene	Substance is not PBT.
Xylene	The substance is not PBT.
Mesitylene	Substance is not PBT.
Solvent naphtha (petroleum), heavy arom.	The substance is not PBT.
Naphthalene	The substance is not PBT.
Butan-1-amine	This substance is not PBT.

#### vPvB assessment:

1, 2, 4-Trimethylbenzene	This substance is not vPvB.
Cumene	Substance is not vPvB.
Xylene	The substance is not vPvB.
Mesitylene	Substance is not vPvB.
Solvent naphtha (petroleum), heavy arom.	The substance is not vPvB.
Naphthalene	The substance is not vPvB.
Butan-1-amine	This 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	NA 1993
UN Proper Shipping Name	Combustible liquid n.o.s 1, 2, 4-Trimethylbenzene, Other Aromatic Hydrocarbons (C9 - C10)


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<b>UN Transport Hazard Class(es)</b>	3	
<b>Packing Group</b>	III	
<b>Environmental Hazards</b>	None	
<b>Special Precautions for User</b>	None	
<b>Additional Information</b>	Pursuant to 49 CFR 173.120(b)(2) and 49 CFR 173.150(f), flammable liquid with a flash point at or above 100°F may be reclassified as a combustible liquid for transportation within the U.S. by motor vehicle or rail only. This material is not regulated for US DOT transportation in quantities less than 119 gallons.	

## International Maritime Dangerous Goods (IMDG)

<b>UN Number</b>	This product is not shipped under this Transport Mode
<b>UN Proper Shipping Name</b>	This product is not shipped under this Transport Mode
<b>UN Transport Hazard Class(es)</b>	None
<b>Packing Group</b>	None
<b>Environmental Hazards</b>	None
<b>Special Precautions for User</b>	None

## SECTION 15: Regulatory Information

### United States Regulations

#### Inventory Listing (TSCA):

95-63-6	1, 2, 4-Trimethylbenzene	Listed - Active
98-82-8	Cumene	Listed - Active
526-73-8	1,2,3-trimethylbenzene	Listed - Active
1330-20-7	Xylene	Listed - Active
611-14-3	2-ethyltoluene	Listed - Active
108-67-8	Mesitylene	Listed - Active
103-65-1	Propylbenzene	Listed - Active
25155-15-1	Cymene	Listed - Active
620-14-4	3-ethyltoluene	Not Listed
622-96-8	4-ethyltoluene	Listed - Active
N/A	Other Aromatic Hydrocarbons (C9 - C10)	Listed
64742-94-5	Solvent naphtha (petroleum), heavy arom.	Listed - Active

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91-20-3	Naphthalene	Listed - Active
109-73-9	Butan-1-amine	Listed - Active

**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:**

95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
1330-20-7	Xylene	Listed
91-20-3	Naphthalene	Listed

**CERCLA:**

98-82-8	Cumene	Listed	5000 lb
1330-20-7	Xylene	Listed	100 lb
91-20-3	Naphthalene	Listed	100 lb
109-73-9	Butan-1-amine	Listed	1000 lbs

**RCRA:**

98-82-8	Cumene	Listed	U055
1330-20-7	Xylene	Listed	U239
91-20-3	Naphthalene	Listed	U165
109-73-9	Butan-1-amine	Listed	D001

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

**Massachusetts Right to Know:**

95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
526-73-8	1,2,3-trimethylbenzene	Listed
1330-20-7	Xylene	Listed
108-67-8	Mesitylene	Listed
103-65-1	Propylbenzene	Listed
91-20-3	Naphthalene	Listed
109-73-9	Butan-1-amine	Listed

**New Jersey Right to Know:**

95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
526-73-8	1,2,3-trimethylbenzene	Listed
1330-20-7	Xylene	Listed
611-14-3	2-ethyltoluene	Listed
108-67-8	Mesitylene	Listed
103-65-1	Propylbenzene	Listed
25155-15-1	Cymene	Listed
620-14-4	3-ethyltoluene	Listed
622-96-8	4-ethyltoluene	Listed
91-20-3	Naphthalene	Listed



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109-73-9	Butan-1-amine	Listed
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### New York Right to Know:

95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
526-73-8	1,2,3-trimethylbenzene	Listed
1330-20-7	Xylene	Listed
108-67-8	Mesitylene	Listed
103-65-1	Propylbenzene	Listed
25155-15-1	Cymene	Listed
91-20-3	Naphthalene	Listed
109-73-9	Butan-1-amine	Listed

### Pennsylvania Right to Know:

95-63-6	1, 2, 4-Trimethylbenzene	Listed
98-82-8	Cumene	Listed
526-73-8	1,2,3-trimethylbenzene	Listed
1330-20-7	Xylene	Listed
108-67-8	Mesitylene	Listed
103-65-1	Propylbenzene	Listed
91-20-3	Naphthalene	Listed
109-73-9	Butan-1-amine	Listed

### California Proposition 65:

**⚠️ WARNING:** This product can expose you to chemicals including Cumene and Naphthalene which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://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**