Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • **BC-505 Liquid Scintillator**

Synonyms • Liquid Scintillator

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Liquid Scintillator

1.3 Details of the supplier of the safety data sheet

Manufacturer
- Luxium Solutions
- 17900 Great Lakes Parkway Hiram,
  OH 44234-9681
  United States
  www.luxiumsolutions.com

Telephone (General) • 440-834-5600

1.4 Emergency telephone number

Contract # 6493674

U.S. & Canada • 1-800-255-3924 – VelocityEHS

International • +1-813-248-0585 – VelocityEHS

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture

CLP

- Flammable Liquids 3 - H226
  Skin Irritation 2 - H315
  Eye Irritation 2 - H319
  Acute Toxicity Inhalation 4 - H332
  Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335
  Hazardous to the aquatic environment Chronic 2 - H411

2.2 Label Elements

CLP

WARNING

Hazard statements
- H226 - Flammable liquid and vapour
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and/or 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.
P261 - Avoid breathing mist, vapours and/or spray.
P264 - Wash thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response
- P370+P378 - In case of fire: Use appropriate media for extinction.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P321 - Specific treatment, see supplemental first aid information.
P332+P313 - If skin irritation occurs: Get medical advice/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/attention.
P391 - Collect spillage.

Storage/Disposal
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P235 - Keep cool.
P405 - Store locked up.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

CLP
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012
- Flammable Liquids 3
Aspiration 1
Skin Irritation 2
Eye Irritation 2
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements •
Flammable liquid and vapour
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness

Precautionary statements

Prevention •
Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
Keep container tightly closed.
Ground and/or bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing mist, vapours and/or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response •
In case of fire: Use appropriate media for extinction.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.

Storage/Disposal •
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

• Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015

• Flammable Liquids 3
Aspiration 1
Skin Irritation 2
Eye Irritation 2
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

WHMIS 2015

DANGER

Hazard statements •
Flammable liquid and vapour
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness

Precautionary statements

Prevention •
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electical/ventilating/lighting/ equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid breathing mist, vapours and/or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response •
In case of fire: Use appropriate media for extinction.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.

Storage/Disposal •
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

WHMIS 2015

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
				EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2,	

1,2,4-Trimethylbenzene	**CAS:**95-63-6 **EC Number:**202-436-9 **EU Index:**601-043-00-3	> 98%	Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour (s)	H319; STOT SE 3: Resp. Irrit. (inhl), H335; Aquatic Chronic 2, H411 **OSHA HCS 2012:** Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1 **WHMIS 2015:** Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1	NDA
Aromatic fluors	*Proprietary*	< 1%	NDA	**EU CLP:** Acute Tox. 4, H302 **OSHA HCS 2012:** Acute Tox. 4 (orl) **WHMIS 2015:** Acute Tox. 4 (orl)	NDA

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin
- Wash skin with soap and water. Take off contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention.

Eye
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion
- Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Alcohol resistant foam, carbon dioxide, dry chemical, or water spray.

Unsuitable Extinguishing Media
- Solid water stream.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
  Containers may explode when heated.
  Vapor explosion hazard indoors, outdoors or in sewers.
  Many liquids are lighter than water.
  Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
  Runoff to sewer may create fire or explosion hazard.
  Vapors may form explosive mixtures with air.
  Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products
- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection.
  Wear positive pressure self-contained breathing apparatus (SCBA).

Move containers from fire area if you can do it without risk.
LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.
Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Take proper precautions to minimize exposure by using appropriate personal protective equipment. Do not walk through spilled material.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use only in well ventilated areas. Keep away from heat, sparks, and flame. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapors, and/or spray. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Containers of this material may be hazardous when empty since all emptied containers retain product residues.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Keep container tightly closed. Store in a cool, dry, well-ventilated place.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	**Denmark**	**Finland**	**France**	**Germany DFG**	**Germany TRGS**
Aromatic fluors (Proprietary)	TWAs	0.5 ppm TWA; 5 mg/m3 TWA	Not established	Not established	Not established	Not established
1,2,4-Trimethylbenzene (95-63-6)	TWAs	20 ppm TWA; 100 mg/m3 TWA	20 ppm TWA; 100 mg/m3 TWA	20 ppm TWA [VME] (restrictive limit); 100 mg/m3 TWA [VME] (restrictive limit)	Not established	20 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 100 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)
	STELs	Not established	Not established	50 ppm STEL [VLCT] (restrictive limit); 250 mg/m3 STEL [VLCT] (restrictive limit)	Not established	Not established
	Ceilings	Not established	Not established	Not established	40 ppm Peak (all isomers, listed under Trimethylbenzene); 200 mg/m3 Peak (all isomers, listed under Trimethylbenzene)	Not established
	MAKs	Not established	Not established	Not established	20 ppm TWA MAK; 100 mg/m3 TWA MAK	Not established

Exposure Limits/Guidelines (Con't.)						
	Result	**Greece**	**Hungary**	**Ireland**	**Italy**	**Netherlands**
1,2,4-Trimethylbenzene (95-63-6)	TWAs	25 ppm TWA; 125 mg/m3 TWA	100 mg/m3 TWA [AK]	20 ppm TWA; 100 mg/m3 TWA	20 ppm TWA Media Ponderata nel Tempo; 100 mg/m3 TWA Media Ponderata nel Tempo	100 mg/m3 TWA
	STELs	Not established	Not established	60 ppm STEL (calculated); 300 mg/m3 STEL (calculated)	Not established	200 mg/m3 STEL

Exposure Limits/Guidelines (Con't.)						
	Result	**NIOSH**	**Poland**	**Portugal**	**Spain**	**Sweden**
Aromatic fluors (Proprietary)	Ceilings	0.5 ppm Ceiling; 5 mg/m3 Ceiling	Not established	Not established	Not established	Not established
1,2,4-Trimethylbenzene (95-63-6)	TWAs	25 ppm TWA; 125 mg/m3 TWA	100 mg/m3 TWA [NDS]	20 ppm TWA [VLE-MP] (indicative limit value); 100 mg/m3 TWA [VLE-MP] (indicative limit value)	20 ppm TWA [VLA-ED] (indicative limit value); 100 mg/m3 TWA [VLA-ED] (indicative limit value)	25 ppm LLV; 120 mg/m3 LLV
	STELs	Not established	170 mg/m3 STEL [NDSCh]	Not established	Not established	35 ppm Indicative STLV; 170 mg/m3 Indicative STLV

Exposure Control Notations
Germany DFG
•1,2,4-Trimethylbenzene (95-63-6): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

Exposure Limits Supplemental
Germany TRGS
•1,2,4-Trimethylbenzene (95-63-6): **BELs:** (400 mg/g Medium: urine Time: end of shift Parameter: Dimethylbenzoic acid (sum of all isomers after hydrolysis; measured as mg/g Creatinine); 400 mg/g Medium: urine Time: end of several shifts Parameter: Dimethylbenzoic acid (sum of all isomers after hydrolysis; measured as mg/g Creatinine; for long-term exposures))

8.2 Exposure controls

Engineering Measures/Controls
- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Explosion proof exhaust ventilation should be used.

Personal Protective Equipment

Respiratory
- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face
- Wear chemical splash safety goggles. A full face shield may also be necessary.

Skin/Body
- Wear appropriate gloves. Wear chemical resistant apron or full body suit.

Environmental Exposure Controls
- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
MSHA = Mine Safety and Health Administration
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures
LLV = Limit Level Value is the exposure limit for 8-hour work day

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear, fluorescent liquid with an aromatic odor.
Color	Clear, fluorescent.	Odor	Aromatic
Odor Threshold	Data lacking		
General Properties			
Boiling Point	336 °F(168.8889 °C)	Melting Point/Freezing Point	-46 °F(-43.3333 °C)
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.88 Water=1	Water Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	7 mmHg (torr)	Vapor Density	4.15 Air=1
Evaporation Rate	Data lacking		
Flammability			

Flash Point	120 °F(48.8889 °C) TCC (Tagliabue Closed Cup)	UEL	6.4 %
LEL	0.9 %	Autoignition	932 °F(500 °C)
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Keep away from heat, sparks, and flame.

10.5 Incompatible materials

- Strong oxidizing agents.

10.6 Hazardous decomposition products

- Combustion/burning can form carbon monoxide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
1,2,4-Trimethylbenzene (> 98%)	95-63-6	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 5 g/kg; Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour(s); **Multi-dose Toxicity:** Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; *Kidney, Ureter, and Bladder*:**Other changes in urine composition**; Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; *Behavioral*:**Changes in motor activity (specific assay)**; *Behavioral*:**Analgesia**; *Behavioral*:**Alteration of operant conditioning**
Aromatic fluors (< 1%)	*Proprietary*	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 1000 mg/kg; *Liver*:**Changes in liver weight**; **Multi-dose Toxicity:** Ingestion/Oral-Rat TDLo • 1680 mg/kg 14 Day(s)-Continuous; *Blood*:**Changes in serum composition (e.g., TP, bilirubin cholesterol)**; *Biochemical:Metabolism (intermediary)*:**Lipids, including transport**

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Acute Toxicity - Inhalation 4 - ATEmix (inhl) = 1.5 mg/l 4hr (dust/mist) **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
Skin corrosion/Irritation	**EU/CLP** • Skin Irritation 2 **OSHA HCS 2012** • Skin Irritation 2 **WHMIS 2015** • Skin Irritation 2

Serious eye damage/Irritation	**EU/CLP** • Eye Irritation 2 **OSHA HCS 2012** • Eye Irritation 2 **WHMIS 2015** • Eye Irritation 2
Skin sensitization	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
Respiratory sensitization	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
Aspiration Hazard	**EU/CLP** • Data lacking **OSHA HCS 2012** • Aspiration 1 **WHMIS 2015** • Aspiration 1
Carcinogenicity	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
Germ Cell Mutagenicity	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
Toxicity for Reproduction	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking
STOT-SE	**EU/CLP** • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation **OSHA HCS 2012** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation **WHMIS 2015** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
STOT-RE	**EU/CLP** • Data lacking **OSHA HCS 2012** • Data lacking **WHMIS 2015** • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate)
- Harmful if inhaled. May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)
- No data available.

Skin

Acute (Immediate)
- Causes skin irritation.

Chronic (Delayed)
- No data available.

Eye

Acute (Immediate)
- Causes serious eye irritation.

Chronic (Delayed)
- No data available.

Ingestion

Acute (Immediate)
- Aspiration of the product into lung following ingestion may cause pulmonary injury leading to pneomonitis.

Chronic (Delayed)
- No data available.

Key to abbreviations

LC = Lethal Concentration
LD = Lethal Dose
TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

Components		
1,2,4-Trimethylbenzene (> 98%)	95-63-6	**Aquatic Toxicity-Fish:** 96 Hour(s) LC50 *Pimephales promelas (Fathead Minnow)* 7.72 mg/L **Aquatic Toxicity-Crustacea:** 48 Hour(s) EC50 *Daphnia magna (Water Flea)* 3.6063 mg/L

- Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1993	Flammable liquid, n.o.s. (1,2,4 TRIMETHYLBENZENE)	3	III	NDA
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. (1,2,4 TRIMETHYLBENZENE)	3	III	NDA
IMO/IMDG	UN1993	FLAMMABLE LIQUID, N.O.S. (1,2,4 TRIMETHYLBENZENE)	3	III	NDA
IATA/ICAO	UN1993	Flammable liquid, n.o.s. (1,2,4 TRIMETHYLBENZENE)	3	III	NDA

14.6 Special precautions for user
- None specified.

14.7 Transport in bulk according to Annex II of
- Data lacking.

Marpol and the IBC Code

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Fire

State Right To Know		
Component	**CAS**	**PA**
1,2,4-Trimethylbenzene	95-63-6	Yes
Aromatic fluors	*Proprietary*	No

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**China**	**EU EINECS**	**EU ELNICS**
1,2,4-Trimethylbenzene	95-63-6	Yes	No	Yes	Yes	No
Aromatic fluors	*Proprietary*	Yes	No	Yes	Yes	No

Inventory (Con't.)			
Component	**CAS**	**Korea KECL**	**TSCA**
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes
Aromatic fluors	*Proprietary*	Yes	Yes

Canada

Labor

Canada - WHMIS 1988 - Classifications of Substances

• 1,2,4-Trimethylbenzene	95-63-6	B3
• Aromatic fluors	*Proprietary*	Not Listed

Canada - WHMIS 1988 - Ingredient Disclosure List

• 1,2,4-Trimethylbenzene	95-63-6	0.1 %
• Aromatic fluors	*Proprietary*	1 %

Environment

Canada - CEPA - Priority Substances List

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

China - Ozone Depleting Substances - Second Schedule

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

China - Ozone Depleting Substances - Third Schedule

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed

• Aromatic fluors	*Proprietary*	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

China - Dangerous Goods List

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Environment

Germany - TA Luft - Types and Classes

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

• 1,2,4-Trimethylbenzene	95-63-6	ID Number 3925, hazard class 2 - hazard to waters
• Aromatic fluors	*Proprietary*	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• 1,2,4-Trimethylbenzene	95-63-6	1.0 % de minimis concentration
• Aromatic fluors	*Proprietary*	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - California - Proposition 65 - Developmental Toxicity		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Female		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - California - Proposition 65 - Reproductive Toxicity - Male		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
• 1,2,4-Trimethylbenzene	95-63-6	
• Aromatic fluors	*Proprietary*	Not Listed
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
• Aromatic fluors	*Proprietary*	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H226 - Flammable liquid and vapour

Revision Date
- 27/July/2023

Preparation Date
- 04/February/2009

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Key to abbreviations

NDA = No Data Available