

SAFETY DATA SHEET

Issue Date 16-August-2002 Revision Date 14-September-2020 Version 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name LINDRON 101

Other Means of Identification

SDS # LC-042

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Resin solution

Details of the Supplier of the Safety Data Sheet

Supplier Address Lindau Chemicals, Inc. 731 Rosewood Drive Columbia, SC 29201

Emergency Telephone Number

Company Phone Number Phone: 1-803-799-6863

Fax: 1-803-256-3639

Emergency Telephone INFOTRAC 01-352-323-3500 (International)

1-800-457-4280 (North America)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: The information below, excluding flammability, relates to repeated and prolonged exposure, particularly to the vapor form of the substance. The supplier has indicated that eye exposure normally results in eye irritation.

Classification

Flammable Liquids	Category 3
Serious Eye Damage/Eye Irritation	Category 2A
Skin Corrosion/Irritation	Category 2
Specific Target Organ Toxicity (Repeated Exposure)	Category 2
Toxic to Reproduction	Category 2
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration Hazard	Category 1

Signal Word

Danger

Hazard Statements

H226: Flammable liquid and vapor

H319: Causes serious eye irritation

H315: Causes skin irritation

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

H361: Suspected of damaging fertility or the unborn child

H340: May cause genetic defects

H350: May cause cancer

H304: May be fatal if swallowed and enters airways



Appearance Clear, colorless liquid Physical State Liquid Odor Moderate aromatic

Precautionary Statements - Prevention

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

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

P260: Do not breathe fumes or vapors.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P280: Wear protective gloves, protective clothing and eye protection.

Precautionary Statements - Response

P308 + P313: If exposed or concerned: Get medical advice/attention.

P305 + P351: IF IN EYES: Rinse cautiously with water for several minutes.

P338: Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

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

P352: Wash with plenty of soap and water.

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

P363: Wash contaminated clothing before reuse.

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

P331: Do NOT induce vomiting.

P370 + P378: In case of fire: Use water spray (fog), dry chemical, CO₂ or alcohol-resistant aqueous film-forming foam to extinguish.

Precautionary Statements - Storage

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

P405: Store locked up.

Precautionary Statements - Disposal

P501: Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Copolymer of Styrene and 2-Ethylhexylacrylate	25153-46-2	49–51
Petroleum naphtha, light aromatic	64742-95-6	< 51
1,2,4-Trimethylbenzene	95-63-6	5–25
Xylene	1330-20-7	0–2
Cumene	98-82-8	0–2
Styrene	100-42-5	0–1

Note

Light aromatic petroleum naphtha is a complex mixture of many compounds. Only its hazardous components are listed above.

^{**} If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

First Aid Measures

General If exposed to this product in any way outside of normal handling and if there is concern

about this exposure, get medical advice or attention.

Inhalation Move person to fresh air. If breathing is difficult, administer oxygen. If breathing has

stopped, give artificial respiration. Keep person warm and quiet. Get medical attention

immediately.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Get medical attention if irritation occurs.

Ingestion If swallowed, do not induce vomiting because of danger of aspirating liquid into lungs. If

spontaneous vomiting occurs, keep head below hips to prevent aspiration. Monitor breathing. Never give anything by mouth to an unconscious person. Call immediately a

physician or your local Poison Control Center.

Skin Contact Thoroughly wash exposed area with plenty of soap and water while removing all

contaminated clothing, including shoes. Launder contaminated clothing before reuse.

Get medical attention if skin irritation develops or persists.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms May cause dermatitis or irritation in some individuals upon prolonged contact. Eyes

may have symptoms of redness, itching, irritation and watering from overexposure. Product is an aspiration hazard; if swallowed, it can enter lungs and cause damage. May cause irritation to the mucous membranes and upper respiratory tract. Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically. Treatment of overexposure should be directed toward the control of

symptoms and be based on the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Media Dry chemical, carbon dioxide (CO₂), alcohol-resistant aqueous film-forming foam, water

spray (fog)

Unsuitable Media Straight streams or jets of water

Specific Hazards Arising from the Chemical

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations distant from the material handling point. Vapors may form explosive mixtures in air. Static discharges may occur in this material.

Hazardous Combustion Products Carbon monoxide, carbon dioxide, reactive hydrocarbons, irritating vapors

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool surrounding fire-exposed equipment, containers, tanks and structures with water spray or stream. Take precautionary measures against static discharges.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as required (see Section 8). Persons not wearing

protective equipment should be excluded from the area of the spill until clean-up has been completed. Eliminate or remove all sources of ignition. Ensure adequate ventilation. Avoid

breathing fumes or vapors.

Environmental Precautions Avoid subsoil penetration. Prevent product from entering drains. Do not flush into surface

water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and Material for Containment and Cleaning Up

Methods for Containment Ensure adequate ventilation. Stop spill at source, if safe to do. Dike area of spill to prevent

spreading or entry into sewers, basements or confined areas. Pump liquid to salvage tanks

or containers.

Methods for Cleaning Up Spillage may be taken up with non-combustible, absorbent material. Collect resulting

material in suitable containers for disposal. Clean up and dispose of material in

accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Do not handle until all safety precautions have been read and understood. Use personal

protection recommended in Section 8. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing fumes or vapors. Use only with adequate ventilation. Keep containers tightly closed. Keep containers upright to prevent leakage. Avoid all possible sources of ignition. Ground and bond containers when transferring material. Use non-sparking tools and explosion-proof equipment. Take precautionary

measures against static discharges.

Other Precautions

Electrostatic discharge may provide an ignition source for flammable liquids. The organic solvents in this product are considered nonconductive, and an additive is included in the formulation to increase the product's conductivity to greater than 100 picosiemens per meter. Other precautions may be required depending on specific conditions of storage and transfer. For guidance on preventing electrostatic ignition, consult NFPA 77, Recommended Practice on Static Electricity (2007), API Recommended Practice (2003), Protection Against Ignitions Arising out of Static, Lightning and Stray Currents (2008).

Conditions for Safe Storage. Including any Incompatibilities

Storage Conditions Keep containers tightly closed when not in use and store in a dry, cool and well-ventilated

area. Avoid excessive temperatures.

Packaging Materials Do not transfer to unmarked containers. Empty containers may retain product residue (liquid

or vapor). Do not pressurize, cut or weld empty containers, and do not expose them to heat

or ignition sources.

Incompatible Materials Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
1,2,4-Trimethylbenzene 95-63-6	TWA: 25 ppm TWA: 123 mg/m ³	TWA: 25 ppm TWA: 120 mg/m ³	TWA: 25 ppm TWA: 125 mg/m ³
Xylene 1330-20-7	TWA: 100 ppm TWA: 434 mg/m³ STEL: 150 ppm STEL: 651 mg/m³	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³
Cumene 98-82-8	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm TWA: 245 mg/m ³	TWA: 50 ppm TWA: 245 mg/m³ IDLH: 900 ppm
Styrene 100-42-5	TWA: 20 ppm STEL: 40 ppm	TWA: 100 ppm STEL: 200 ppm	TWA: 50 ppm TWA: 215 mg/m³ STEL: 100 ppm STEL: 425 mg/m³ IDLH: 700 ppm

Control Parameters

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear approved safety goggles. Eye-wash facilities should be readily available.

Skin and Body ProtectionWear chemical resistant, impermeable gloves. Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. If applicable, use process

enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. Wear appropriate breathing apparatus if air renewal is not sufficient to maintain vapor concentrations below threshold limit values.

General Hygiene Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State Liquid

Appearance Clear, colorless liquid Odor Moderate aromatic Color Colorless **Odor Threshold** Not determined

Values Remarks/Method **Property**

pН Not determined **Melting Point/Freezing Point** Not determined

Boiling Point/Boiling Range 160-174 °C (320-345 °F) Flash Point 38-46 °C (100-115 °F)

Evaporation Rate 0.1 Flammability (Solid, Gas) n/a-liquid

Upper Flammability Limit Unknown Lower Flammability Limit 1% (approximate)

Vapor Pressure < 10 mm Hg **Relative Vapor Density** 3.5

Specific Gravity 0.95 Water Solubility Negligible

Solubility in Other Solvents Not determined **Partition Coefficient** Not determined **Autoignition Temperature** 471 °C (880 °F) **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined **Percent Volatile by Weight** 49%-51%

(Tag closed cup)

(butyl acetate = 1) @ 25 °C (77 °F)

@ 25 °C (77 °F)

(air = 1)

(water = 1) @ 15 °C (59 °F)

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation Breathing small amounts during normal handling is not likely to cause harmful effects.

Breathing large amounts may cause depression of the central nervous system, nausea,

headache, dizziness, drowsiness or unconsciousness.

Eye Contact Exposure may cause serious eye irritation, including itching, burning, redness and tearing.

Ingestion Ingestion may result in headache, dizziness or drowsiness. Aspiration may cause chemical

pneumonitis or pulmonary edema.

Skin Contact Exposure causes skin irritation or drying. Prolonged exposure may cause dermatitis or

skin cracking.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum naphtha, light aromatic 64742-95-6	8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.6 mg/L (Rat)4 h (dust / mist)
1,2,4-Trimethylbenzene 95-63-6	6000 mg/kg (Rat)	> 3440 mg/kg (Rat)	10.2 mg/L (Rat)4 h (dust / mist)
Xylene 1330-20-7	4300 mg/kg (Rat)	> 1700 mg/kg (Rabbit)	5000 ppm (Rat) 4 h (dust / mist)
Cumene 98-82-8	1400 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	39 mg/L (Rat) 4 h
Styrene 100-42-5	5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	12 mg/L (Rat) 4 h (dust / mist)

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see Section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short-term and Long-term Exposure

Mutagenicity May cause genetic defects

Carcinogenicity May cause cancer

Chemical Name	International Agency for Research on Cancer	National Toxicology Program
Cumene 98-82-8	Group 2B Possibly carcinogenic to humans	Reasonably anticipated
Styrene 100-42-5	Group 2A Probably carcinogenic to humans	Reasonably anticipated

STOT – Single Exposure Product may cause respiratory irritation, drowsiness or dizziness.

Aspiration Hazard Product may be fatal if it is swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long-lasting effects

Toxicity to Fish

Chemical Name	CAS No	Species	LC50 (mg/L)	Exposure (Method)
Petroleum naptha, light aromatic	64742-95-6	Oncorhynchus mykiss	9.22	96 h
1,2,4-Trimethylbenzene	95-63-6	Pimephales promelas	7.72	96 h (flow-through)
Xylene	1330-20-7	Pimephales promelas	13.40	96 h (flow-through)
		Pimephales promelas	23.53–29.97	96 h (static)
		Oncorhynchus mykiss	2.66-4.09	96 h
		Lepomis macrochirus	19.00	96 h
		Lepomis macrochirus	13.10–16.50	96 h (flow-through)
		Lepomis macrochirus	7.71–9.59	96 h (static)
		Poecilia reticulata	30.26-40.75	96 h (static)
Cumene	98-82-8	Pimephales promelas	6.04–6.61	96 h (flow-through)
		Oncorhynchus mykiss	4.80	96 h (flow-through)
		Oncorhynchus mykiss	2.70	96 h (semi-static)
		Poecilia reticulata	5.10	96 h (semi-static)
Styrene	100-42-5	Pimephales promelas	4.02	96 h (flow-through)
		Pimephales promelas	29.00	96 h (static)
		Lepomis macrochirus	25.05	96 h (static)
		Poecilia reticulata	58.75–95.32	96 h (static)

Toxicity to Algae/Aguatic Plants, Microorganisms and Crustacea

Chemical Name	Algae/aquatic plants EC50	Microorganisms EC50	Crustacea EC50
Petroleum naptha, light aromatic	Pseudokirchneriella subcapitata		Daphnia magna
64742-95-6	3.1 mg/L 72 h		4.50 mg/L 48 h
1,2,4-Trimethylbenzene			Daphnia magna
95-63-6			3.60 mg/L 48 h
Xylene	Pseudokirchneriella subcapitata	0.0084 mg/L 24 h	Daphnia magna 3.82 mg/L 48 h
1330-20-7	72 mg/L 14 d		Gammarus lacustris 0.6 mg/L 48 h
Cumene	Pseudokirchneriella subcapitata	0.89 mg/L 5 min	Daphnia magna
98-82-8	2.6 mg/L 72 h	1.10 mg/L 15 min	2.14 mg/L 48 h
		1.48 mg/L 30 min	
		172 mg/L 24 h	
Styrene	Selenastrum capricornutum	5.4 mg/L 5 min	Daphnia magna
100-42-5	4.9 mg/L 72 h		4.7 mg/L 48 h

Persistence and Degradability

Not determined. Some evidence suggests product is not readily biodegradable.

Mobility

Not determined.

Bioaccumulation

Chemical Name	CAS No	Partition Coefficient (log Pow)
Petroleum naptha, light aromatic	64742-95-6	3.42
1,2,4-Trimethylbenzene	95-63-6	3.63
Xylene	1330-20-7	2.77–3.15
Cumene	98-82-8	3.66
Styrene	100-42-5	2.95

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of WastesDisposal should be in accordance with applicable federal, state and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable federal, state and local laws and

regulations.

Chemical Name	CAS No	RCRA Listing	RCRA – Basis for Listing
Xylene	1330-20-7	U239	Included in waste stream: F039
Cumene	98-82-8	U055	

State of California This product contains substances that are listed with the state of California as hazardous

wastes.

Chemical Name	CAS No	California Hazardous Waste Status
Xylene	1330-20-7	Toxic / Ignitable
Cumene	98-82-8	Toxic / Ignitable
Styrene	100-42-5	Toxic / Ignitable

14. TRANSPORTINFORMATION

Proper Shipping Name by Regulatory Entity

DOT Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha)

IMDG Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha)

IATA Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha)

Regulatory Information	UN Number	Class	Packing Group	Label
DOT Classification	UN-1993	3	III	PLANMABLE LIQUIS
IMDG Classification	UN-1993	3	III	TANKAHE LUDUD
IATA Classification	UN-1993	3	III	TRAMMARIE LIBERS

Note

Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances. This material may be non-regulated in non-bulk packages for DOT ground only per 49 CFR 173.150(f).

15. REGULATORY INFORMATION

International Inventories

Component 25153-46-2 Listed TSCA, DSL/NDSL, ENCS, IECSC, KECI, PICCS, TCSI, AICS, NZIOC

Component 64742-95-6 Listed TSCA, DSL/NDSL, EINECS/ELINCS, IECSC, KECI, PICCS, TCSI, AICS, NZIOC

Other Components Listed TSCA, DSL/NDSL, EINECS/ELINCS, ENCS, IECSC, KECI, PICCS, TCSI, AICS, NZIoC

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECI - Korea Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substance Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

United States Federal Regulations

EPCRA

This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-know Act of 1986 (40 CFR 372). This information must be included in all SDSs that are copied and distributed for this material.

Chemical Name	CAS No	Weight-%	EPCRA 313 Threshold Value %
1,2,4-Trimethylbenzene	95-63-6	5–25	1.0
Xylene	1330-20-7	0–2	1.0
Cumene	98-82-8	0–2	1.0
Styrene	100-42-5	0–1	0.1

CERCLA

Chemical Name	CAS No	Hazardous Substances Reportable Quantity (RQ)
Xylene	1330-20-7	RQ 100 lb final RQ / RQ 45.4 kg final RQ
Cumene	98-82-8	RQ 5000 lb final RQ / RQ 2268 kg final RQ
Styrene	100-42-5	RQ 1000 lb final RQ / RQ 454 kg final RQ

Clean Water Act (CWA)

Chemical Name	Chemical Name CAS No		CWA – Hazardous Substances	
Xylene	1330-20-7	100 lb / 45.4 kg	Listed	
Styrene	100-42-5	1000 lb / 454 kg	Listed	

SARA 311/312

Chronic health hazard, fire hazard

United States State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name CAS No		California Proposition 65		
Cumene	Cumene 98-82-8			
Styrene	100-42-5	Carcinogen		

United States State Right-to-Know Regulations

Chemical Name	California	Florida	Massachusetts	Minnesota	New Jersey	Pennsylvania
1,2,4-Trimethylbenzene 95-63-6			Х	Х	Х	X
Xylene 1330-20-7	Х		Х	Х	Х	X
Cumene 98-82-8			Х	Χ	Х	X
Styrene 100-42-5	X	X	X	X	X	X

16. OTHER INFORMATION

Issue Date16-August-2002Revision Date14-September-2020Revision NoteReviewed/updated

GHS Version 2

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet