



SAFETY DATA SHEET

Issue Date 25-March-2010

Revision Date 15-September-2020

Version 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name LINDRON 191

Other Means of Identification

SDS # LC-047

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Coating resin

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

Skin Corrosion/Irritation	Category 3
Specific Target Organ Toxicity (Single Exposure)	Category 3
Aquatic Hazard (Acute)	Category 3
Toxic to Reproduction	Category 2
Flammable Liquids	Category 2
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration Hazard	Category 1

Signal Word

Danger

Hazard Statements

H316: Causes mild skin irritation
H335: May cause respiratory irritation
H402: Harmful to aquatic life
H361: Suspected of damaging fertility or the unborn child
H225: Highly flammable liquid and vapor
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.

P261: Avoid breathing fumes or vapors.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

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

Precautionary Statements - Response

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

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

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

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

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 + P233 + P235: Store in a well-ventilated place. Keep container tightly closed. 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
t-Butyl acetate	540-88-5	20–25
Petroleum naphtha, light aromatic	64742-95-6	< 27
1,2,4-Trimethylbenzene	95-63-6	3–14
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.
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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.
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5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Media	Dry chemical, carbon dioxide (CO ₂), 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
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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. Ground and bond all equipment.
Methods for Cleaning Up	Spillage may be taken up with non-combustible, absorbent material. Using electrically protected equipment, 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.
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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, strong acids, strong bases

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/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³
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/m ³ 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/m ³ STEL: 100 ppm STEL: 425 mg/m ³ IDLH: 700 ppm
t-Butyl acetate 540-88-5	TWA: 200 ppm	TWA: 200 ppm TWA: 950 mg/m ³	TWA: 200 ppm TWA: 950 mg/m ³ IDLH: 1500 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 Protection Wear 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	Odor	Moderate aromatic
Appearance	Clear, colorless liquid	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	98 °C (208 °F)	
Flash Point	11 °C (52 °F)	(Tag closed cup)
Evaporation Rate	2.0	(butyl acetate = 1) @ 25 °C (77 °F)
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limit	7% (approximate)	
Lower Flammability Limit	1% (approximate)	
Vapor Pressure	42 mm Hg	@ 20 °C (68 °F)
Density	0.95 g/cm ³	@ 25 °C (77 °F)
Specific Gravity	Not determined	
Weight per Gallon	7.95 lbs/gal	@ 25 °C (77 °F)
Water Solubility	Slightly soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	425 °C (797 °F) (approximate)	
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%	

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.
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Conditions to Avoid

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

Incompatible Materials

Strong oxidizing agents, strong acids, strong bases

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)
t-Butyl acetate 540-88-5	4500 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

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 naphtha, 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)
Cumene	98-82-8	Poecilia reticulata	30.26–40.75	96 h (static)
		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)
Styrene	100-42-5	Poecilia reticulata	5.10	96 h (semi-static)
		Pimephales promelas	4.02	96 h (flow-through)
		Pimephales promelas	29.00	96 h (static)
		Lepomis macrochirus	25.05	96 h (static)
t-Butyl acetate	540-88-5	Poecilia reticulata	58.75–95.32	96 h (static)
		Oncorhynchus mykiss	240	96 h (semi-static)

Toxicity to Algae/Aquatic Plants, Microorganisms and Crustacea

Chemical Name	Algae/aquatic plants EC50	Microorganisms EC50	Crustacea EC50
Petroleum naphtha, light aromatic 64742-95-6	Pseudokirchneriella subcapitata 3.1 mg/L 72 h		Daphnia magna 4.50 mg/L 48 h
1,2,4-Trimethylbenzene 95-63-6			Daphnia magna 3.60 mg/L 48 h
Xylene 1330-20-7	Pseudokirchneriella subcapitata 72 mg/L 14 d	0.0084 mg/L 24 h	Daphnia magna 3.82 mg/L 48 h Gammarus lacustris 0.6 mg/L 48 h
Cumene 98-82-8	Pseudokirchneriella subcapitata 2.6 mg/L 72 h	0.89 mg/L 5 min	Daphnia magna
		1.10 mg/L 15 min	2.14 mg/L 48 h
		1.48 mg/L 30 min	
		172 mg/L 24 h	
Styrene 100-42-5	Skeletonema costatum 78 mg/L 96 h	5.4 mg/L 5 min	Daphnia magna 4.7 mg/L 48 h
t-Butyl acetate 540-88-5	Pseudokirchneriella subcapitata 16 mg/L 72 h		Daphnia magna 350 mg/L 48 h

Persistence and Degradability

Not determined

Mobility

Not determined

Bioaccumulation

Chemical Name	CAS No	Partition Coefficient (log P _{ow})
Petroleum naphtha, 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
t-Butyl acetate	540-88-5	1.76

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable federal, state and local laws and regulations. Extra care must be taken in the incineration of this material because it is highly flammable. It is advised that a licensed professional waste disposal service be used to dispose of this material.

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. TRANSPORT INFORMATION

Proper Shipping Name by Regulatory Entity

DOT Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha and t-butyl acetate)
IMDG Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha and t-butyl acetate)
IATA Flammable liquid, n. o. s. (contains light aromatic petroleum naphtha and t-butyl acetate)

Regulatory Information	UN Number	Class	Packing Group	Label
DOT Classification	UN-1993	3	II	
IMDG Classification	UN-1993	3	II	
IATA Classification	UN-1993	3	II	

Note
 Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

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:

<i>TSCA</i> - United States Toxic Substances Control Act Section 8(b) Inventory
<i>DSL/NDSL</i> - Canadian Domestic Substances List/Non-Domestic Substances List
<i>EINECS/ELINCS</i> - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
<i>ENCS</i> - Japan Existing and New Chemical Substances
<i>IECSC</i> - China Inventory of Existing Chemical Substances
<i>KECI</i> - Korea Existing Chemicals Inventory
<i>PICCS</i> - Philippines Inventory of Chemicals and Chemical Substances
<i>TCSI</i> - Taiwan Chemical Substance Inventory
<i>AICS</i> - Australian Inventory of Chemical Substances
<i>NZIoC</i> - 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	3-14	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
t-Butyl acetate	540-88-5	RQ 5000 lb final RQ / RQ 2268 kg final RQ

Clean Water Act (CWA)

Chemical Name	CAS No	CWA – Reportable Quantity	CWA – Hazardous Substances
Xylene	1330-20-7	100 lb	Listed
Styrene	100-42-5	1000 lb	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	98-82-8	Carcinogen
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			X	X	X	X
Xylene 1330-20-7	X		X	X	X	X
Cumene 98-82-8			X	X	X	X
Styrene 100-42-5	X	X	X	X	X	X
t-Butyl acetate 540-88-5			X		X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	3	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	3	0	Not determined

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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