



SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier	KL-100, KL-200, KL-300 series
Other means of identification	Research grade purified lignin products
Recommended use and restrictions on use	Research and development
Manufacturer	PureLig, Inc. www.purelig.com 6429 vireo ct. Lake worth, FL 33463
Phone	+1 9195185004

2. HAZARDS IDENTIFICATION

Classification of the product	No need for classification according to GHS criteria for this product.
Label elements	The product does not require a hazard warning label in accordance with GHS criteria.
Hazards not otherwise classified	No specific dangers known, if the regulations/notes for storage and handling are considered.
Emergency overview	If used as intended, this product is not expected to present a physical or health hazard. Ensure adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear full face shield if splashing hazard exists.

3. FIRST AID MEASURES

Inhalation	Move person to fresh air. If breathing is affected, get medical attention.
Ingestion	Rinse mouth and drink 1-2 glasses of water. Seek medical attention. Do not induce vomiting unless directed by medical personnel. Do not administer anything by mouth to an unconscious person.
Eyes	Flush with water for 15 min. If irritation develops, get medical attention.
Skin	Wash with soap and water. If irritation develops, get medical attention.

4. HANDLING AND STORING

Handling	Avoid repeated, prolonged skin contact. Avoid eye contact. Eye wash station and safety shower should be readily accessible
Conditions for safe storage, including any incompatibilities	Normal above freezing storage for non-hazardous products. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

5. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) 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.
Respiratory Protection	Use appropriate respiratory protection to prevent overexposure.
Skin Protection	Suitable gloves, boots and apron.
Eye/Face Protection	Safety glasses with side-shields. Wear face shield if splashing hazard exists.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

6. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	solid
Odor	Mild chemical odor
Odor threshold	Not available
Color	brown
pH	5-7
Autoignition	Does not ignite
Solubility in Water	Dispersible
Specific Gravity	0.9 – 1
Vapor Density	Not available
Vapor Pressure	Not available
Volatile by Weight, %	Not available

7. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Conditions to avoid	Products can decompose at elevated temperatures above 200 °C
Materials to avoid	Addition of alkaline solution can dissolve the products.
Hazardous decomposition products	Thermal decomposition may cause various hydrocarbons and irritating vapors.
Chemical stability	The product is stable if stored and handled as prescribed

8: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No adverse effect due to inhalation is expected
Skin contact	No adverse effect due to skin contact is expected
Eye contact	Direct contact may cause temporary irritation
Ingestion	Expected to be a low ingestion hazard
Acute toxicity	Estimated to be >5000 mg/kg (rat)
Oral LD50	Estimated to be >5000 mg/kg (rat)
Inhalation LC50	Not a respiratory sensitizer
Skin irritation	Prolonged skin contact may cause temporary irritation
Chronic toxicity/effects	None known.
Genetic toxicity	Not available.
Carcinogenicity	Not available.
Reproductive toxicity	Not available.
Teratogenicity	Not available.

9. ECOLOGICAL INFORMATION

Ecotoxicity	The product is not classified as environmentally hazardous.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.

10. DISPOSAL CONSIDERATIONS

Waste disposal method	Products are natural based and compostable
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11. TRANSPORTATION INFORMATION

The transportation information may vary according to package size. Please refer to Bill of Lading for specific information.

US DOT Classification	Not regulated
Canada TDG Classification	Not regulated

12. REGULATORY INFORMATION

Please refer to the Technical Information Sheet for additional information.

Disclaimer	This material safety data sheet is offered for your information only. We believe the statements, technical information and recommendations contained herein are reliable but are given without warranty or guarantee of any kind, expressed or implied. .
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PRODUCT NUMBER

KL-100
KL-200
KL-300