

GrapeSeal™ Lost Circulation Material

Covers product codes: GS-F (Fine) | GS-M (Medium) | GS-C (Coarse)

1. IDENTIFICATION

PRODUCT IDENTIFIER

GrapeSeal™ Lost Circulation Material (LCM)
GS-F (Fine) / GS-M (Medium) / GS-C (Coarse)

SUPPLIER

GrapeSeal Technologies
1200 Industrial Parkway, Suite 400
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RECOMMENDED USE

Lost circulation material for oil and gas well drilling fluids (WBM, OBM, SBM).
Not for food, pharmaceutical, or consumer use.

EMERGENCY TELEPHONE (24/7)

CHEMTREC: +1 (800) 424-9300
International (collect): +1 (703) 527-3887

2. HAZARD(S) IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS — GHS / OSHA HazCom 2012

This product is not classified as a hazardous substance or mixture under OSHA Hazard Communication Standard (29 CFR 1910.1200). No signal word, hazard pictograms, or GHS hazard statements are required.

COMBUSTIBLE DUST ADVISORY (non-GHS classification)

This product may generate combustible dust concentrations in air when mechanically handled or disturbed. Specific combustible dust testing (ASTM E1226 / ASTM E2019) has not been performed. Handle in accordance with NFPA 652 and OSHA CPL 03-00-008.

Voluntary precautionary statements: P210 – Keep away from heat, sparks, open flames. P241 – Use explosion-proof electrical equipment. P260 – Do not breathe dust. P280 – Wear respiratory protection and eye protection.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance type: Mixture. Ground grape seed cake derived from *Vitis vinifera* winery processing byproduct.

COMPONENT	CAS NO.	EC NO.	CONCENTRATION
<i>Vitis vinifera</i> seed cake (ground grape seed)	84929-27-1	284-503-3	≥ 99% w/w
Water (residual moisture)	7732-18-5	231-791-2	≤ 12% w/w

No components present at concentrations triggering classification or disclosure requirements under OSHA HazCom 2012.

4. FIRST-AID MEASURES

EYE CONTACT

Flush immediately with running water for ≥ 15 min, holding eyelids open. Remove contact lenses if easy to do. Seek medical attention if irritation persists.

INHALATION

Remove to fresh air. Allow to rest in a comfortable breathing position. Seek medical attention if coughing or shortness of breath persists.

SKIN CONTACT

Wash with soap and water for ≥ 5 min. No special treatment required. Seek medical attention if irritation develops.

INGESTION

Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention if large quantities ingested or symptoms develop.

Note to Physician

No specific antidote. Treat symptomatically. Product is a non-toxic, plant-derived organic material. Most important symptoms: mechanical irritation of eyes and respiratory tract from dust.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, foam, dry chemical powder, CO₂.

Unsuitable extinguishing media: High-velocity water jet (risk of scattering burning material and raising dust clouds).

Fire-fighting instructions: Wear SCBA and full structural protective clothing. Approach from upwind. Cool containers with water spray. Prevent runoff from entering drains or waterways.

Special hazards: May form combustible dust cloud in air when finely divided and disturbed. Dust clouds can be ignited by sparks or flames.

Products of combustion: Carbon monoxide (CO), carbon dioxide (CO₂), water vapor, carbonaceous particulate.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Eliminate ignition sources. Avoid generating airborne dust. Use PPE described in Section 8. Ensure adequate ventilation.

Environmental precautions: Prevent discharge to waterways in large quantities. Biodegradable material; minor releases are low environmental risk.

Containment and cleanup: Sweep or vacuum with dust-tight equipment. Do not use compressed air. Collect in labeled, sealable containers for disposal (see Section 13). Wash area with water after collection.

Regulatory notification: Not a CERCLA hazardous substance. No reportable quantity. No release reporting required.

7. HANDLING AND STORAGE

Handling: Avoid generating excessive dust during transfer and mixing. Provide local exhaust ventilation at transfer points. Keep away from heat, open flames, and sparks. Use electrical equipment rated Class II, Division 2, Group G where dust may accumulate. Follow good industrial hygiene — wash hands before eating or using restroom facilities.

Storage: Store in a cool (below 40°C), dry, well-ventilated location. Keep bags sealed to prevent moisture absorption and caking. Stack pallets no more than 3 high. **Shelf life: 24 months** from manufacture under proper conditions.

Incompatibles: Strong oxidizing agents (see Section 10).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits (no substance-specific OEL established; PNOR/PNOS limits apply):

REGULATORY AUTHORITY	PARAMETER	LIMIT
OSHA PEL (29 CFR 1910.1000, Table Z-1)	Total dust (PNOR)	15 mg/m ³
OSHA PEL (29 CFR 1910.1000, Table Z-1)	Respirable fraction (PNOR)	5 mg/m ³
ACGIH TLV (2024)	Inhalable particles (PNOS)	10 mg/m ³
ACGIH TLV (2024)	Respirable particles (PNOS)	3 mg/m ³

Engineering controls: Local exhaust ventilation at transfer, mixing, and dispensing points. General dilution ventilation for enclosed areas. Enclosed handling systems where practical.

PPE TYPE	MINIMUM REQUIREMENT
Respiratory	N95 filtering facepiece for routine handling; full-face P100 respirator if OEL may be exceeded
Eye / Face	Safety glasses with side shields; safety goggles in dusty conditions
Hands	General purpose work gloves (nitrile or leather)
Body	Long-sleeved work clothing; no special material required

No biological limit values (BEIs) established for components of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	GS-F FINE	GS-M MED.	GS-C COARSE	PROPERTY	VALUE (ALL GRADES)
Appearance	Brown to dark brown granular powder / solid			pH (10% slurry)	4–6
Odor	Mild fruity / vinous			Solubility in water	Insoluble (hygroscopic)
d50 Particle size (µm)	75–150	150–425	425–2,000	Melting point	N/A (organic solid)
Bulk density (g/cm ³)	0.35–0.45	0.40–0.50	0.45–0.55	Flash point	N/A (solid)
Moisture content	≤ 12% w/w			Vapor pressure	Negligible
				Decomposition temp.	~200–250°C (est.)
				Combustible dust Kst	St1 class (est.)†
				MIE (estimated)	>100 mJ (est.)†

† Reference data for analogous organic powders. ASTM E1226/E2019 testing recommended for batch-specific verification.

10. STABILITY AND REACTIVITY

Reactivity: No hazardous reactivity under normal conditions.

Chemical stability: Stable under recommended storage and handling conditions.

Conditions to avoid: High temperatures, open flames, sparks, electrostatic discharge in dusty environments.

Incompatible materials: Strong oxidizing agents (e.g., concentrated H₂O₂, permanganates, peroxides, concentrated chlorine compounds).

Hazardous decomposition products: CO and CO₂ upon combustion. None at ambient temperatures.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

ENDPOINT	CLASSIFICATION / DATA
Acute oral	Not classified. Est. LD ₅₀ >5,000 mg/kg (rat) — GRAS botanical material
Acute dermal	Not classified
Acute inhalation	Not classified
Skin irritation	Not classified (mild mechanical irritation possible)
Eye irritation	Not classified (reversible dust irritation possible)
Skin sensitization	Not classified
Carcinogenicity	Not listed — IARC, NTP, OSHA, ACGIH
Mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT single/repeated	Not classified
Aspiration hazard	N/A (solid)

12. ECOLOGICAL INFORMATION

PARAMETER	ASSESSMENT
Aquatic toxicity	No adverse effects expected; no ecotoxic components
Persistence	Readily biodegradable (plant-derived organic)
Bioaccumulation	Not expected (low log Kow for plant constituents)
Mobility in soil	Low; water-insoluble solid
Other effects	None expected; agricultural byproduct origin

13. DISPOSAL CONSIDERATIONS

Product disposal: Not a RCRA hazardous waste (40 CFR 261). Dispose per applicable local, state, and federal regulations. Acceptable options: permitted sanitary landfill, composting, or agricultural soil amendment.

Packaging disposal: Multiwall paper sacks may be recycled or disposed as non-hazardous solid waste. Seal empty bags before disposal to minimize dust.

14. TRANSPORT INFORMATION

REGULATORY BODY	UN NO.	PROPER SHIPPING NAME	HAZARD CLASS	PACKING GROUP	ENVIRONMENTAL HAZARD
DOT (49 CFR)	Not regulated	Not regulated	None	N/A	None
IMDG (sea)	Not regulated	Not regulated	None	N/A	None
IATA (air)	Not regulated	Not regulated	None	N/A	None

15. REGULATORY INFORMATION

OSHA HazCom 2012 (29 CFR 1910.1200): Not classified as hazardous. This SDS is prepared in compliance with HazCom 2012.

TSCA (40 CFR 710): All components listed or exempt from TSCA inventory as naturally occurring substances (40 CFR 710.4(b)).

CERCLA / SARA §311/312: Not a CERCLA hazardous substance; no reportable quantity. Not subject to SARA hazard category reporting.

SARA §313: No listed TRI-reportable toxic release components present.

California Proposition 65: No components listed under CA Health & Safety Code §25249.5 at concentrations requiring a warning.

WHMIS 2015 (Canada): Not classified as a controlled product.

16. OTHER INFORMATION

Revision date: 12 November 2025 | **Revision:** Rev. 01 — Initial issue

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NFPA 704: Health **0** / Flammability **1** / Reactivity **0** / Special: **CD**

HMIS III: Health **1*** / Flammability **1** / Physical **0** / PPE: **B**

Key abbreviations: GHS = Globally Harmonized System; LCM = Lost Circulation Material; MIE = Minimum Ignition Energy; NFPA = National Fire Protection Association; OEL = Occupational Exposure Limit; PEL = Permissible Exposure Limit; PNOR/PNOS = Particles Not Otherwise Regulated/Specified; RCRA = Resource Conservation and Recovery Act; SCBA = Self-Contained Breathing Apparatus; STOT = Specific Target Organ Toxicity; TLV = Threshold Limit Value.

Disclaimer

The information in this SDS is believed to be accurate as of the revision date and is provided in good faith. No warranty, express or implied, is made as to its accuracy or completeness. Users are responsible for determining the suitability of this product for their particular application and must comply with all applicable laws and regulations. GrapeSeal Technologies assumes no liability for injury or damage resulting from use of this product in a manner inconsistent with this SDS.

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