


Safety Data Sheet

Oyster Shell

SECTION 1: IDENTIFICATION

GHS product identifier:	Pacific Pearl Oyster Shell
Other means of identification:	Crushed Oyster Shell, Oyster Shell Flour, Oyster Shell Lime, Ag Lime, Soil Conditioner, Stall & Pen Freshener.
Relevant identified uses of the substance or mixture and uses advised against:	Oyster shell may be used as livestock and poultry feed supplement, soil amendment material, and human calcium supplement. Oyster shell may be distributed in 50-55 lb bags, bulk bags (super-sacks), and bulk shipments. No known recommended restrictions.
Supplier's details:	LIND MARINE, 300 East D Street, Petaluma, CA 94952 707-762-7251
Emergency telephone number:	(707) 762-7251

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:	REPEATED EXPOSURE SKIN CORROSION/IRRITATION – Category 2 EYE DAMAGE/IRRITATION – Category 2B
GHS label elements	
Hazard pictograms:	
Signal word:	Danger
Hazard statements:	May cause respiratory irritation May cause damage to organs (lungs) through prolonged or repeated exposure Causes skin irritation Causes serious eye irritation
Precautionary statements:	
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash any exposed body parts. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.
Storage:	Restrict or control access to stockpile areas. Engulfment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains shell without an effective procedure for assuring safety.
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazards not otherwise classified (HNOC):	None known.
Supplemental Information:	Oyster Shell is a naturally occurring mineral complex that contains significant quantities of calcium carbonate. In its natural bulk state, oyster shell is not a known health hazard. Oyster shell may be subjected to various natural or mechanical

forces that produce small particles (dust) which may contain respirable particles less than 10 micrometers in aerodynamic diameter.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

CAS number/other identifiers

Substance / Mixture:	Oyster Shell	
INGREDIENT NAME	%	CAS NUMBER
Oyster Shell	>99	None
Calcium Carbonate	>90%	471-34-1

Any concentration shown as a range is to protect confidentiality or is due to process variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. These materials are mined from the earth. Trace amounts of naturally occurring elements might be detected during chemical analysis of these materials.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

Description of necessary first aid measures

Eye Contact:	Dust: Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contacts if present and easy to do. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or persists.
Inhalation:	Dust: Move to fresh air. Call a physician if symptoms develop or persist.
Skin Contact:	Dust: Wash off with soap and water. Get medical attention if irritation develops and persists.
Ingestion:	Dust: Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed

Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing. Prolonged inhalation may cause chronic health effects.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician:	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
Specific treatments:	Not Applicable
Protection of first-aiders:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
General information:	Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust. See toxicological information (Section 11).

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media:	Not flammable. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	No unusual fire or explosion hazards noted. Not a combustible dust.
Hazardous thermal decomposition Products:	None known
Special protective equipment for fire-fighters:	Use protective equipment appropriate for surrounding materials. No specific precautions.
General fire hazards:	Contact with powerful oxidizing agents may cause fire and/or explosions (see section 10 of SDS). Concentrations of fine organic dust may be explosion hazards.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate dust.

Methods and materials for containment, cleaning up and Environmental precautions

Spilled material, where dust is generated, may overexpose cleanup personnel to respirable dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Avoid discharge of fine particulate matter into drains or water courses.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Protective measures:	Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.
Advice on general occupational hygiene:	Observe good industrial hygiene practices. Promptly remove dusty clothing and launder before reuse.
Conditions for safe storage, including any incompatibilities:	Avoid dust formation or accumulation.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational exposure limits:

1 – Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918)

2 – Value also applies to MSHA metal/Non-Metal (1973 TLVs at 30 CFR 56/57.5001)

3 – Value also applies to OSHA construction (29 CFR 1926.55 Appendix A) and shipyards (29 CFR 1915.1000 Table Z) 5 – MSHA limit = 10 mg/m³

INGREDIENT NAME	EXPOSURE LIMITS
Particulates not otherwise classified (CAS SEQ250)	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m ³ . Form: Respirable particles (2) TWA: 10 mg/m ³ . Form: Inhalable particles (2) OSHA PEL (United States, 6/2010) PEL: 5 mg/m ³ . Form: Respirable fraction PEL: 15 mg/m ³ . Form: Total dust (3) TWA: 5 mg/m ³ . Form: Respirable fraction (1) TWA: 15 mg/m ³ . Form: Total dust (1, 3, 5)

Appropriate engineering controls:	Good general ventilation (typically 10 air changes per hour indoors) 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.
Exposure guidelines:	OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) should be monitored and controlled. Terms including "Particulates Not Otherwise Classified," "Particulates Not Otherwise Regulated," "Particulates Not Otherwise Specified," and "Inert or Nuisance Due" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.
Biological limit values:	No biological exposure limits noted for the ingredient(s)

Individual protection measures

Hygiene measures:	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.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Hand protection:	Use personal protective equipment as required.
Body protection:	Use personal protective equipment as required.
Other skin protection:	Use personal protective equipment as required.
Respiratory protection:	When handling or performing work that produces dust in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.
Thermal hazards:	Not anticipated. Wear appropriate thermal protective clothing if necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State:	Solid, particles of granular mixture	Lower and Upper explosive flammable limits	Not applicable
Color:	Buff to Grey	Vapor pressure:	Not applicable
Odor:	Not applicable	Vapor density:	Not applicable
Odor threshold:	Not applicable	Relative density:	Not available
pH:	Not available	Solubility:	Not available
Melting point:	Not applicable	Solubility in water:	Insoluble
Boiling point:	Not applicable	Partition coefficient: n-octanol/water:	Not applicable
Flash point:	Non-combustible	Auto-ignition temperature:	Not applicable
Burning time:	Not applicable	Decomposition temperature:	Not applicable
Burning rate:	Not applicable	SADT:	Not available
Evaporation Rate:	Not applicable	Viscosity:	Not applicable
Flammability (solid, gas):	Not applicable		

SECTION 10: STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability:	Material is stable under normal conditions
Possibility of hazardous reactions:	May react violently with acids.
Conditions to avoid:	Avoid contact with acids and strong oxidizers.
Incompatible materials:	Acids, strong oxidizers.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:	Not expected to be acutely toxic.
Irritation/Corrosion:	Skin: Dust: May cause irritation through mechanical abrasion. This product is not expected to be a skin hazard. Eyes: Direct contact with eyes may cause temporary irritation through mechanical abrasion. Inhalation: May cause respiratory irritation. Ingestion: Not likely due to product form. However accidental ingestion may cause discomfort.
Sensitization:	Respiratory sensitization: No respiratory sensitizing effects known. Skin sensitization: Not known to be a dermal irritant or sensitizer.

Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Aspiration Hazard:	Not expected to be an aspiration hazard.
Reproductive toxicity:	Not expected to be a reproductive hazard.
Symptoms related to physical, chemical and toxicological characteristics:	Dust: discomfort in the chest. Shortness of breath. Coughing.
Carcinogenicity:	Not known to be a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not expected to be harmful to aquatic organisms. Discharging oyster shell dust and fines into waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

Persistence and degradability:	Not applicable.
Bioaccumulative potential:	Not applicable.
Mobility in soil:	Not applicable.
Other adverse effects:	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods:	Do not allow fine particulate matter to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with fine particulates. Dispose of contents in accordance with local/regional/national/international regulations.
Hazardous waste code:	Not regulated.
Waste from residues/unused products:	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging:	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty packaging materials should be recycled or disposed of in accordance with applicable regulations and practices.

SECTION 14: TRANSPORTATION INFORMATION

	DOT CLASSIFICATION	IMDG	IATA
UN number	Not Regulated	Not Regulated	Not Regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	-	-	-
Additional information	-	-	-

SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations:	
OSHA Hazard Communication Standard, 29 CFR 1910.1200 :	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200
TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D):	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not listed
CERCLA Hazardous Substance List (40 CFR 302.4):	Not listed
Clean Air Act Section 112 (b), Hazardous Air Pollutants (HAPs):	Not regulated
Clean Air Act Section 112 (r) Accidental Release Prevention (40 CFR 68.130):	Not regulated
Safe Drinking Water Act	Not regulated

California Prop. 65

WARNING: This product may contain chemicals (trace metals) known to the State of California to cause cancer.

International regulations

Canada

Ingredient name					
Calcium Carbonate CAS 471-34-1	Listed on Canadian DSL Inventory. Class D Division 2 Subdivision B - Toxic material causing other toxic effects				

WHMIS Classification:

D2b "Materials Causing Other Toxic Effects"



SECTION 16: OTHER INFORMATION

Version: 01/25/2016
Revised Section(s): N/A

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of oyster shell as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with oyster shell to produce oyster shell products. Users should review other relevant material safety data sheets before working with this oyster shell or working on oyster shell products.

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Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists
CAS — Chemical Abstract Service
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act
CFR — Code of Federal Regulations
DOT — Department of Transportation
GHS — Globally Harmonized System
HEPA — High Efficiency Particulate Air
IATA — International Air Transport Association
IARC — International Agency for Research on Cancer
IMDG — International Maritime Dangerous Goods
NIOSH — National Institute of Occupational Safety and Health
NOEC — No Observed Effect Concentration
NTP — National Toxicology Program
OSHA — Occupational Safety and Health Administration
PEL — Permissible Exposure Limit
REL — Recommended Exposure Limit
RQ — Reportable Quantity
SARA — Superfund Amendments and Reauthorization Act
SDS — Safety Data Sheet TLV — Threshold Limit Value
TPQ — Threshold Planning Quantity
TSCA — Toxic Substances Control Act
TWA — Time-Weighted Average UN — United Nations