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Safety Data Sheet

Date Effective: 04/15/2020

Catalog #: 30099

Bell Shine

Section 1.1: Identification

Chemical Name/Synonyms Solution of a Mixture of Polyphosphoric acids and Phosphoric acid ethylhexyl esters

Product or Trade Name Bell Shine

CAS #'s 683343-20-7; 141-65-1; 7732-18-5

Chemical Formula..... Mixture

Section 1.2: Relevant Uses/Restrictions

Surfactant; Wetting agent

Section 1.3: Supplier of the Safety Data Sheet

Ladd Research
83 Holly Court
Williston, VT 05495
Tel: (802) 658-4961
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Section 1.4: 24 hr Emergency telephone number - Chemtrec

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritant, Category 2

Skin sensitizer, Category 1

2.2 Label elements

Pictogram



Signal Word: Warning

Hazard statements:

- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

Precautionary statements:

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352 IF ON SKIN: Wash with soap and water.
- P305 + P351 + P228 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention.
- P337 + P313 If eye irritation persists get medical advice/attention.
- P262 Do not get in eyes, on skin, or on clothing.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly with soap and water.
- P233 Keep container tightly closed.
- P271 Use only outdoors or in a well ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P501 Dispose of contents / container in accordance with local, state, national and international regulations.

2.3 Other Hazards:

Hazardous Material Information System USA

Health 3
Fire Hazard 1
Reactivity 0
Personal Protection

NFPA Rating (estimated)

Health 2
Flammability..... 1
Reactivity 0

Section 3: Composition

3.1 Substances: Not applicable.

3.2 Mixtures:

Chemical	CAS No.	Percentage
Polyphosphoric acids, 2-ethylhexyl esters, sodium salt	683343-20-7	0.4 - 1%
Phosphoric acid, bis(2-ethylhexyl) ester, sodium salt	141-65-1	0.1 - 0.4%

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Skin Contact

Immediately remove and discard contaminated clothing and shoes. Under a safety shower, wash all affected areas with plenty of soap and water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately.

Eye contact

Immediately flush eyes with large amounts of water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Do not let victim rub eye(s). Do not attempt to neutralize the material. Get medical attention immediately.

Ingestion

Get medical attention by calling a physician or a poison control center immediately. Do not induce vomiting unless directed to do so by medical personnel. If victim is conscious and alert, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head below hips to reduce the risk of aspiration.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Information for doctor: Attending physician should treat exposed patients symptomatically.

Section 5: Fire Fighting Measures

5.1 Extinguishing media

Use water fog or spray, dry chemical, foam, or carbon dioxide extinguishing agents.

5.2 Special hazards arising from the substance or mixture

This product is not defined as flammable or combustible. However, the product may support combustion and decompose under fire conditions. The material is self-extinguishing once the source of ignition is removed. It is not sensitive to static discharge or physical impact.

Decomposition of this product under fire conditions can produce carbon oxides, phosphorus oxides and organic decomposition products including alkenes.

5.3 Protective equipment

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non-essential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. If possible, move containers from the fire area. If not leaking, keep fire exposed containers cool with a water fog or spray to prevent rupture due to excessive heat. High pressure water may spread product from broken containers increasing contamination or fire hazard. Dike fire control water for later disposal. Do not allow contaminated water to enter waterways.

Section 6: Accidental Release Measures

6.1 Personal precautions

Isolate spill area and restrict nonessential personnel. All personnel involved in spill cleanup should follow appropriate industrial hygiene practices (see Section 8).

6.2 Environmental precautions

Stop source of spill if possible. Dike area to prevent spill from spreading.

6.3 Methods and material for containment and cleaning up

Soak up liquid with a suitable absorbent such as clay, sawdust, or kitty litter. Sweep up absorbed material and place in a chemical waste container for disposal. Cover spill area with a slurry of powdered household detergent and water. Use stiff brush to work slurry into cracks and crevices. Allow to stand for 2-3 minutes, then flush with water. Dike water for later disposal. Do not allow contaminated water to enter waterways or sewers.

6.4 Reference to other sections

See Section 13 for disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Protective measures

Wear protective clothing including chemical goggles and rubber gloves when handling this product to avoid eye and skin contact. Handle in a well ventilated area. Avoid inhalation of vapor or mist. Wash thoroughly after handling.

Empty containers may retain product residues. Follow all warnings and precautions even after container is empty.

7.2 Conditions for safe storage, including any incompatibilities

Information about protection against explosions and fires: Keep away from heat, sparks and open flames.

Suggested storage conditions: The product is normally shipped in polyethylene-lined, fiber containers.

Information about storage in one common storage facility: Store away from foodstuffs and animal feed. Containers should be stored in a cool, dry, well-ventilated area away from flammable or incompatible materials and sources of heat or flame.

Further information about storage conditions: To prevent acid build-up, do not store the product at temperatures above 48.8 °C or 120 °F.

7.3 Specific end uses

Surfactant; Wetting agent

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection

Workplace exposure limits: No relevant information available.

Biological limit values: No relevant information available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Information about design of technical systems:

At elevated processing temperatures or in the event that use conditions generate airborne vapor, aerosol, or mist, the material should be handled in a well-ventilated area.

Where adequate ventilation is not available, respiratory protection should be used.

8.2.2 Individual protection measures

General protective and hygienic measures: Skin contact, eye contact, and inhalation are the primary routes of exposure to this product.

Breathing equipment: Use a NIOSH-approved organic vapor/acid gas respirator (OVAG) with dust, mist, and fume filters to reduce potential for inhalation exposure if use conditions generate vapor, mist, or aerosol and adequate ventilation (e.g. outdoor or well-ventilated area) is not available.

Protection of hands: Skin contact with liquid or its aerosol should be prevented through the use of suitable protective clothing, gloves, and footwear selected with regard for use condition exposure potential.

Eye protection: Eye contact with liquid or aerosol should be prevented through the use of chemical safety goggles and/or a face shield selected with regard for use condition exposure potential.

Body protection: Safety showers, with quick opening valves which stay open and eye wash fountains or other means of washing the eyes with a gentle flow of cool to tepid tap water should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather. Long sleeved clothing may be used to minimize skin contact.

8.2.3 Environmental exposure controls

No additional relevant information available.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Form: Liquid

Appearance: Clear

Odor: Not determined

Odor threshold: Not determined

pH: 7.2 (0.5 % solution)

Melting point/Freezing point: Not determined

Boiling point/Boiling point range: Not determined

Flash Point: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability or explosive limits: Product does not present an explosion hazard

Vapor Pressure: Not determined

Vapor density: Not determined

Relative density: Not determined

Bulk density at 25 °C (77 °F): Not determined

Solubility in / Miscibility with water at 25 °C (77 °F): , 1%

Partition coefficient (n-octanol/water): Not determined

Auto-ignition temperature: Product is not self-igniting.

Decomposition temperature: Not determined
Viscosity: Not determined
Explosive properties: Not explosive
Oxidizing Properties: Not determined

9.2 Other information: No further relevant information available.

Section 10: Stability and Reactivity

10.1 Reactivity: This product is not self-reactive.

10.2 Chemical Stability: This product is stable at ambient temperatures and atmospheric pressures.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization is not expected to occur.

10.4 Conditions to avoid:

This product is stable at ambient temperatures and atmospheric pressures. It is not self-reactive and has an almost infinite shelf life under sealed conditions. It is not sensitive to static discharge or physical impact. Loss of water will occur at temperatures above 100 °C (212 °F). The residue will emit a flammable alkene if heated to temperatures above 160 °C (320 °F).

Avoid prolonged storage at elevated temperatures (above 49 °C (120 °F)). Avoid contact with strong oxidizers and acids.

10.5 Incompatible materials: This product is incompatible with strong oxidizers and strong acids. It hydrolyzes slowly in acidic aqueous solutions at ambient temperatures.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide; Phosphorus oxides (e.g. P₂O₅).

Section 11: Toxicological Information

Information on the likely routes of exposure

A. Acute Toxicity

LD/LC50 values that are relevant for classification:

Oral	LD50	rat	3366 mg/kg	(slightly toxic)
Dermal	LD50	rabbit	>1000 mg/kg	

B. Skin corrosion/irritation

This material is corrosive to rabbit skin following a 4-hour exposure. Contact may cause severe burns with redness and edema. Prolonged or repeated contact causes severe irritation or burns.

C. Serious eye damage/irritation

On the eye: This product is expected to be corrosive to rabbit eyes.

D. Respiratory irritation

Inhalation of vapors and fumes from this product can cause respiratory tract irritation.

- E. Respiratory or skin sensitization: Not determined.
- F. Ingestion
Ingestion may cause digestive tract irritation, vomiting, abdominal pain and diarrhea.
- G. Target Organs
Overexposure to this product may affect the skin, eyes, and respiratory system.
- H. STOT-single exposure
No relevant information available.
- I. STOT-repeated exposure
No relevant information available.
- J. Aspiration hazard
No relevant information available.

Section 12: Ecological Information

12.1 General Notes: At present there are no ecotoxicological assessments.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Product:

Recommendation: Material that cannot be used or chemically reprocessed should be disposed of in accordance with all applicable federal, state, and local regulations.

This product, if unused, does not meet the EPA's criteria as either a listed or characteristic hazardous waste under the Resource Conservations and Recovery Act (RCRA) as published in 40 CFR 261.

Uncleaned Packagings:

Recommendation: Containers should be drained of residual material before disposal. Emptied containers should be disposed of in accordance with all applicable laws and regulations.

Product containers designed for single use should be thoroughly emptied before disposal.

Section 14: Transport Information

DOT US:

Hazard class: Not considered hazardous for shipping

Identification number:

Packing group:

Proper shipping name:

Label:

Remarks: This product does not contain an environmentally hazardous substance
As per 49 CFR 172.101, Appendix A.

IATA:

Hazard class: Not considered hazardous for shipping

Identification number:

Label:

Packaging Group:

Proper shipping name:

IMDG:

Hazard Class: Not considered hazardous for shipping
Identification Number:
Label:
Packaging group:
Marine pollutant:
Proper shipping name:

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

TSCA (Toxic Substances Control Act):
Substance is listed.

TSCA Section 12(b) – Export Notification:
This product does not contain any chemicals subject to Section 12(b) export notification.

SARA Title III: Section 304 – CERCLA:
This product does not contain a hazardous substance regulated under Section 304 for emergency release notification (CERCLA LIST).

SARA Title III: Section 313 (Specific toxic chemical listings):
This product does not contain a toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372 (annual Toxic Chemical Release Reporting).

SARA Title III: Section 355 (extremely hazardous substances):
None of the ingredients are listed.

California Proposition 65:
Chemicals known to cause cancer: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
Chemicals known to cause developmental toxicity: None of the ingredients is listed.

OSHA Status:
This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Resource Conservation and Recovery Act (RCRA):
This product is not considered to be a hazardous waste under RCRA (40 CFR 261):

CANADA WHIMIS:
Symbols:



WHMIS Classification: E

15.2 Chemical Safety Assessment – has not been carried out.

Date of Preparation: 6 September 2018

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Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer’s Recommended Guidelines
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling

Section 16: Other Information

Disclaimer of Liability:

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