Petronio Shoe Products

MATERIAL SAFETY DATA SHEET

TRADE NAME: **Acetone**

Section 1 - Identification of the substance/preparation and company

Manufacturer:
Petronio Shoe Products
305 Cortlandt Street
Belleville, NJ 07109
EMAIL: petronioshoeglue@aol.com

Last Revision: June 13, 2012
General MSDS Assist: 973-751-7579
24 Hr Emergency Assist: 800-535-5053

Commercial Product Name: Acetone

Section 2 - Hazards Identification

Emergency Overview

Form: Liquid
Color: Colorless
Odor: sweet pungent
Hazard Summary: **DANGER!** Extremely Flammable liquid and vapor. Vapor may cause flash fire. In use, may form flammable/explosive vapor-air mixture. Forms or accumulates static electricity, may cause fire or explosion. Aspiration hazard if swallowed- can enter lungs and cause damage. May be harmful if inhaled. Causes headache, drowsiness or other effects to the central nervous system. Irritating to the eyes and respiratory system. May irritate skin. May cause target organ or system damage to the following: respiratory system, nervous system, kidney, blood system and liver.

Potential Health Effects

Skin Contact: May cause mild skin irritation. Prolonged or repeated contact may defatting resulting in drying, redness and possible blistering. Skin absorption can transport other toxins into the body.

Eye Contact: Irritating to the eyes. Causes itching, burning, and tearing. May cause corneal injury.

Ingestion: Aspiration hazard if swallowed-can enter lungs and cause damage. May cause irritation of the gastrointestinal tract. May cause systemic poisoning with symptoms paralleling those of inhalation.

Inhalation: Causes respiratory tract irritation. Vapor may be irritating to eyes, nose, throat and lungs. Inhalation of high vapor concentrations can cause CNS-depression and narcosis. High vapor concentrations can cause headaches, dizziness, drowsiness, and nausea and may lead to unconsciousness.

Chronic exposure: Causes headache, drowsiness or other effects to the central nervous system. Prolonged or repeated contact may defatting resulting in drying, redness and possible blistering. May cause target organ or system damage to the following: respiratory system, nervous system, kidney, blood system and liver.

Aggravated Medical Condition: Skin disorders, Eye disorders, Cardiac irregularities, Respiratory disorders, Asthma

Target Organs: Eyes, Skin, Respiratory System, Central nervous system, Heart.

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC or OSHA

Section 3- Composition / Information on Ingredients

Components	CAS No.	Concentration
ACETONE	67-64-1	100%

Section 4- FIRST AID MEASURES

Inhalation: Remove to fresh air. Not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.
Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. Call a physician.
Eye Contact: Rinse immediately with water, also under eyelids, for at least 15 minutes. Call a physician.
Ingestion: Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Call a physician.

Notes to physician:
Treatment: Treat symptomatically. Risk of product entering the lungs on vomiting after ingestion.

Section 5 - Fire-Fighting Measures

Flash point	-17˚C (1˚F)
Ignition temperature	465˚C (869˚F)
Lower explosion limits	2.5% (V)
Upper explosion limits	12.8% (V)
Suitable Extinguishing Media	Cool containers exposed to fire with water spray, Dry chemical, Carbon dioxide (CO2), alcohol-resistant foam
Specific hazards during fire fighting	Extremely flammable. Forms or accumulates static electricity, may cause fire or explosion. Vapors may form explosive mixtures in air. Vapors are heavier than air and may spread along floor. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide and Carbon dioxide (CO2)
Special protective Equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
Additional advice	Acetone/water solutions that contain more than 2.5% acetone have flash points. When the acetone concentration is greater than 8% (by weight0 in a closed container, it would be within the flammable range and cause fire or explosion if a source of ignition were introduced.

Section 6- Accidental Release Measures

Personal Precautions
Wear personal protective equipment. Unprotected persons should be kept away. Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Do not swallow. Do not breathe vapors or mist. Avoid contact with skin, eyes, and clothing.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Discharge into the environment must be avoided. Do not flush into surface water or sanitary sewer system. Do not allow run-off from fire fighting to enter drains or water courses.
Methods for cleaning up/taking up: Ventilate the area. No sparking tools should be used. Use explosion-proof equipment. Contain spillage and then collect with non-combustible absorbent material, (e.g. sand, ear, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations. (see section 13).

Section 7 - Handling and Storage

Handling: Wear personal protective equipment. Use only in well-ventilated areas. Keep container tightly closed. Do not use air pressure to unload containers. Do not smoke, do not swallow.
Do not breathe vapors or mist. Avoid contact with skin, eyes, and clothing.
Advise on protection against fire and explosion: Keep away from fire, sparks and heated surfaces. This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity. Static electricity accumulation may be significantly increased by the presence of small quantities of water. Always bond the receiving container to fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements. Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during “switch loading” operations (i.e. loading this material in tanks or shipping compartments that previously contained middle distillates or similar products). Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding. Use explosion-proof equipment. Keep product and empty container away from heat and sources of ignition. Use only non-sparking tools. No smoking.

Storage: Store in area designed for storage of flammable liquids. Protect from physical damage. Keep containers tightly closed in a dry, cool, and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat and sources of ignition. Keep away from direct sunlight. Store away from incompatible substances. Container hazardous when empty. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat or sources of ignition.

Section 8 - Exposure Controls/ Personal Protection

Protective measures; Ensure that eyewash stations and safety showers are close to the workstation location.
Engineering measures: Use only in an area equipped with explosion proof exhaust ventilation. Prevent vapor buildup by providing adequate ventilation during and after use. Electrical equipment should be protected to the appropriate standard.
Eye protection: Do not wear contact lenses. Wear as appropriate, Safety glasses with side-shields, If splashes are likely to occur, wear; Goggles or face shield, giving complete protection to eyes.
Hand protection: Solvent-resistant gloves, Gloves must be inspected prior to use. Replace when worn.
Skin and Body Protection: Wear as appropriate; Solvent-resistant apron and boots. Flame retardant antistatic protective clothing. If splashes are likely to occur, wear; Protective suit.
Respiratory protection: In the case of vapor formation use a respirator with an approved filter. For rescue and maintenance work in storage tanks use self-contained breathing apparatus. Use NIOSH approved respiratory protection.
Hygiene measures: When using, do not eat, drink, or smoke. Wash hands and face before breaks and immediately after handling the product. Keep working clothes separately. Remove and wash contaminated clothing before re-use. Do not swallow. Do not breathe vapor or spray mist. Avoid contact with skin, eyes, and clothing.

Exposure Guidelines

Acetone		**67-64-1**
ACGIH	Short term exposure limit	750 ppm
ACGIH	time weighted average	500 ppm
ACGIH NIC	Short term exposure limit	500 ppm
ACGIH NIC	time weighted average	200 ppm
NIOSH	Recommended exposure limit (REL)	250 ppm
NIOSH	Recommended exposure limit (REL)	590 mg/m3
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	2,400 mg/m3
OSHA Z1A	Short term exposure limit	1,000 ppm
OSHA Z1A	Short term exposure limit	2,400 mg/m3
OSHA Z1A	time weighted average	750 ppm
OSHA Z1A	time weighted average	1,800 mg/m3

Section 9 - Physical and chemical properties

Form:	Liquid
Color:	colorless
Odor:	sweet pungent
Molecular Weight	58.08 g/mol
pH	7
Melting point/range:	94˚ C (-137 ˚F)
Boiling point/range:	56.1˚C (133.0˚F0
Vapor pressure	241 hPa at 20˚C (68˚F)
Density	0.79 g/cm3
Water solubility	completely soluble

Section 10-Stability and reactivity

Conditions to avoid; Heat, flames and sparks. Keep away from direct sunlight.
Materials to avoid: acids, aldehydes, alkalis, amines, ammonia, oxidizing agents, reducing agents, chlorine compounds. May form explosive mixtures with chromic anhydride, chromyl alcohol, hexachloromelamine, hydrogen peroxide, permonosulfuric acid, potassium tertbutoxide, and thioglycol.
Hazardous decomposition Products In case of fire hazardous decomposition products may be produced such as carbon monoxide and carbon dioxide (CO_2)
Hazardous reactions hazardous polymerization does not occur. Stable under normal conditions.

Section 11- Toxicological information

Acute Oral Toxicity
Acetone LD 50 Rat: 5,800 mg/kg
Acute Inhalation Toxicity
Acetone LC 50 Rat: 32000 ppm, 4 hr
Acute Dermal Toxicity
Acetone LD 50 Guinea pig: 7,426 mg/kg
Skin Irritation
Acetone Rabbit; mild skin irritation, 24 hr
Eye Irritation
Acetone Rabbit; irritating to eyes, Draize Test
Repeated dose Toxicity: Species: Rat NOEL: 19000 ppm Note: 8-week Inhalation Toxicity study 5days/week for 8 weeks. Slightly reduced weight gain compared to controls. Species: Rat NOEL: 100 mg/kg Note: 90-Day Oral Toxicity Study increased liver and kidney weights.
Species: Rat Lowest observable effect level: 500 mg/kg NOTE: 90-Day Oral Toxicity study increased liver and kidney weights.

Section 12- Ecological information

Ecotoxicity effects
Toxicity to Fish: Static Test LC50: 5,540 mg/l Exposure time: 96 h Species: Rainbow trout
Static Test LC50: 8,300 mg/l Exposure time: 96 h Species: Bluegill sunfish
Toxicity to daphnia and other aquatic invertebrates: LC50: 12,600-12,700 mg/l exposure time: 48 h Species: Water flea
Toxicity to algae: EC50: 3020 mg/l Exposure time: 14 d Species: Chlorella pyrenoidosa
Toxicity to bacteria: ED50: 14,500 mg/l Exposure time: 15 min Species: Photobacterium phosphoreum
Elimination information (persistence and degradability)
Biodegradability: anaerobic Result: Readily biodegradable Value: 78% Method: OECD 301D

Section 13- Disposal Considerations

Waste Information: Observe all Federal, State and Local Environmental regulations.

Section 14- Transport information

DOT:

UN/ID no. :	UN 1090
Proper Shipping Name:	Acetone
Class	3
Packing Group	II
Hazard Labels	3

IATA:

UN/ID no. :	UN 1090
Description of Goods:	Acetone
Class	3
Packing Group	II
Hazard Labels	3
Packing instruction (cargo aircraft)	364
Packing instruction (passenger aircraft)	353
Packing instruction (cargo aircraft)	Y341

IMDG:

UN/ID no. :	UN 1090
Description of Goods:	Acetone
Class	3
Packing Group	II
Hazard Labels	3
EmS Number	F-E
Marine Pollutant	no

Section 15- Regulatory information

Inventories

1907/2006 (EU)	This mixture contains only ingredients which have been subject to a pre-registration according to the Regulation (EC) no. 1907/2006 (REACH).
US. Toxic Substances Control Act	On TSCA Inventory
Austrailia Industrial Chemical Act	On the inventory, or in compliance with the inventory
Canada, CEPA, DSL (Can.Gaz.Part II, Vol. 144)	All components of this product are on the Canadian DSL list.
Japan, Kashin-Hou Law list:	On the inventory, or in compliance with the inventory
Korea, Existing Chemicals Inv. (KECI):	On the inventory, or in compliance with the inventory

Section 15- Regulatory information Cont'd

Philippines. The Toxic Substances and Hazardous And Nuclear Waste Control Act:	On the inventory, or in compliance with the inventory
China Inventory of Existing Chemcial substances:	On the inventory, or in compliance with the inventory
New Zealand, inventory of chemicals (NZIoC) as published by ERMA New Zealand:	On the inventory, or in compliance with the inventory

National regulatory information
Sara 311/312 Hazard: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

CERCLA Reportable Qty: 5000 lbs

California Prop. 65
WARNING! This product contains a chemical known in the State of California to cause cancer.

Benzene	71-43-2
Acetaldehyde	75-07-0
Cumene	98-82-8

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm:

Toluene	108-88-3
Benzene	71-43-2

Massachusetts RTK

Acetone	67-64-1
Benzene	71-43-2
Acetaldehyde	75-07-0

New Jersey RTK

Acetone	67-64-1

Pennsylvania RTK

Acetone	67-64-1
Benzene	71-43-2

WHMIS Classification:
B2, D2B, This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the required information required by the CPR.

Section 16- Other information

	HMIS III	NFPA
Health Hazard	2*	1
Flammablility	3	3
Physical Hazard	0	
Instability		0

* Chronic health hazard