MATERIAL SAFETY DATA SHEET

LPS Precision Clean Aerosol

Section 1 • Product and Company Identification

Manufacturer's Name: LPS Laboratories

Trade Name: LPS Precision Clean Aerosol

Part Numbers: 02720

Address:
4647 Hugh Howell Road
Tucker, GA USA 30085-5052

Chemical Family: Alkaline, aqueous solution

Telephone Number: 770-243-8800

Emergency Telephone Number:
1-800-424-9300 Chemtrec;
Outside U.S.: (703) 527-3887

Website: http://www.lpslabs.com

PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably won't help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, don't hesitate to call us at 800/241-8334.

Worker Toxicity

LPS PRECISION CLEAN AEROSOL is an industrial chemical. It is a specialized highly alkaline cleaner designed to remove grime, oils, and light grease from metal, concrete and other durable surfaces. It contains sodium metasilicate, a strongly alkaline material that can be irritating to skin and eyes. Avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breathe heavy mist (if working with pressure washing equipment in poorly ventilated areas). For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

Flammability

LPS PRECISION CLEAN AEROSOL is considered to be non-flammable under standard industry tests; however, it does contain a few percent of propane/isobutane propellant ("gas grill" fuel). Be aware of ignition sources in your area when dispensing this product. Flammable propellant is heavier than air and will travel along the floor for some distance.

Disposal

Aerosol products are considered non-hazardous for disposal if they are depressurized and empty. Per U.S. Federal regulations, an aerosol is considered to be empty if it has less than 1 inch of fluid left inside. Aerosols that fail to spray out completely and remain pressurized can be safely punctured so that the concentrate can be used as intended and the container discarded as non-hazardous waste. See section 13 for additional disposal information.

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Overview: WARNING: Mild eye irritant. Contents under pressure.

Primary route(s) of entry: Skin and Eye contact.

Potential Acute Health Effects:

Eyes: Irritating to eyes

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Inhalation of large quantities of spray mist may cause irritation of the respiratory tract.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No **IARC:** No **OSHA:** No

Mutagenic Effects: None

Teratogenic Effects: None

Medical conditions aggravated by exposure: Persons with pre-existing skin disorders or chronic respiratory diseases should avoid exposure.

Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high mist concentrations may cause irritation of throat and eyes.

Section 3 • Composition / Information on Ingredients

Ingredient	CASRN	Target Weight %
Sodium Metasilicate	6834-92-0	0.1 – 1
Dipropylene Glycol Monomethyl Ether	034590-94-8	1 – 2
Propane/isobutane Propellant	68476-85-7	4 – 6
Non-Hazardous Ingredients*	N/A	91 - 95

**The remaining ingredients are not classified as hazardous per 29 CFR 1900.1200 Subpart Z*

Section 4 • First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do not use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately.

Section 5 • Fire Fighting Measures

Products of Combustion: Carbon dioxide and carbon monoxide.

Sensitivity to Impact: None **Sensitivity to Static Discharge:** Yes

Protection Clothing (Fire): None.

Special Remarks on Explosion Hazards: Intensive heat created by fire will cause aerosols to burst.

Section 6 • Accidental Release Measures

Small Spill and Leak: Absorb with an inert material and dispose of properly.

Large Spill and Leak: For large spills, secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Do not flush to sewer.

Section 7 • Handling and Storage

Handling: DO NOT spray into or around ignition sources. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing vapors or spray mists.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store below 120°F.

Precautions to be taken in handling and storage: ***Store aerosols as Level 3 Aerosol (NFPA 30B).*** Store all materials in dry, well-ventilated area. Avoid breathing vapors.

Section 8 • Exposure Controls / Personal Protection

Ingredients	CASRN	OSHA PEL-TWA	ACGIH-TLV	Other Limits
Sodium Metasilicate	6834-92-0	Not established	Not established	Not established
Dipropylene Glycol Methyl Ether	34590-94-8	100 ppm	100 ppm	150 ppm
Propane/isobutane Propellant	68476-85-7	1,000 ppm	1,000 ppm	1250 ppm STEL

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Personal Protection:

Eyes: Safety goggles.

Respiratory : Use a cartridge style respirator effective on alkali (such as the 3M® N95 or equivalent) if ventilation is inadequate.

Hands: Use nitrile or neoprene rubber gloves.

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.

Section 9 • Physical and Chemical Properties

Appearance:	Liquid.	**Colour:**	Turquoise
Odour/Taste:	Citrus.	**Vapour Pressure:**	~24 mm Hg, @ (25 °C)
Solubility Description:	100% in water	**Evaporation Rate:**	1 (H_2O=1)
Boiling Point (°C):	100 @ 760mmHg	**Flash Point (°C):**	<73^{o}F (22.8^{o}C) (Tag Closed Cup.)
Specific Gravity @ 20 °C (Water=1):	Conc: 1.00–1.03	**Aerosol Flame Extension:**	None.
Vapour Density (air=1):	>1	**Auto Ignition Temperature (°C):**	Not Established.
V.O.C. Content:	66 g/L, 6.5%	**Partition Coefficient (octanol/water):**	> 1.0
Flammable limits (estimated):	LOWER: N.E. UPPER: N.E.	**Viscosity:**	<3 centistokes @ 25^{o}C
pH:	Conc: 12.5		

Section 10 • Stability and Reactivity

Stability and Reactivity: The product is stable.

Incompatibility with Various Substances: Extremely reactive or incompatible with oxidizing agents.

Hazardous decomposition products: These products are carbon oxides (CO, CO2)

Hazardous polymerization: Will not occur.

Section 11 • Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

Following exposure to vapors, this material can produce central nervous system depression. High atmospheric concentrations can result in eye, nasal and respiratory tract irritation. However, if handled in accordance with good industrial hygiene practice, this product will not present a significant hazard in the workplace.

Ingredients	CASRN	LC-50	LD-50
Sodium Metasilicate	6834-92-0	Not established	Oral LD50 Rat: 1153 mg/kg; Oral LD50 Mouse: 770 mg/kg
Dipropylene Glycol Methyl Ether	34590-94-8	Not established	Oral LD50 Rat: 5400 µL/kg; Dermal LD50 Rabbit: 10 mL/kg
Propane/isobutane Propellant	68476-85-7	Not available	Not appropriate

Section 12 • Ecological Information

Component Data: Acute Aquatic Toxicity

Component	CASRN	Test	Species	Results
Sodium Metasilicate	6834-92-0	48-hour EC_{50}	Daphnia magna	4857 mg of 35% solution per litre
		96-hour EC_{50}	Brachydanio rerio	3185 mg of 35% solution per litre at pH 10.1
Dipropylene glycol monomethyl ether	34590-94-8	48-hour EC_{50}	Daphnia magna	1919 mg/L
		96-hour EC_{50}	Pimephales promelas	>10,000 mg/L
Propane/isobutane Propellant	68476-85-7	No data available		

Section 13 • Disposal Considerations

Waste Status: In its purchased form, this material is a RCRA hazardous waste carrying waste code D001 (ignitable) and D003 (pressurized aerosols).

Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

Mode	Shipping Name	Hazard Class	Subclass	UN Number	Technical Name	Hazard Label	Packing Group	Emergency Response Guide
D.O.T. Ground	Consumer Commodity	ORM-D	NA	1950	NA	ORM-D	NA	NA
IATA	AEROSOLS, flammable	2.1	NA	1950	NA	Flammable Gas	NA	NA
IMDG (Regular)	AEROSOL	2.1	NA	1950	NA	Flammable Gas	NA	F-D, S-U

Section 15 • Regulatory information

U.S. Federal Regulations:

TSCA 8(b) inventory: All of the ingredients are listed on the TSCA inventory or are exempt.

RCRA Hazardous Waste No.: D001, D003

CERCLA Sections 102a/103 Hazardous Substances (40 CFR part 302) Reportable Quantity: none

SARA TITLE III Sections 311/312 Hazardous Categorization (40 CFR part 370): Sudden Release of Pressure, Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard**.**

SARA TITLE III Section 313: No individual section 313 component is present at or above 1%.

State Regulations:

New Jersey RTK: Water (CASRN# 7732-18-5), Propane/Isobutane Propellant (CASRN# 68476-85-7), Dipropylene Glycol Methyl Ether (CASRN# 34590-94-8), Alcohols, C10-16, ethoxylated (CASRN# 68002-97-1), Sodium Metasilicate (CASRN# 6834-92-0), Tetrapotassium Pyrophosphate (CASRN # 7320-34-5)

California Proposition 65: None.

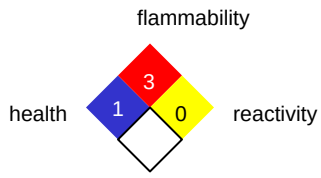
California and OTC States: This product conforms to consumer regulations.

Section 16 • Other Information

MSDS# 12720
Responsible Name: Ed Williams
Technical Manager

	HMIS
Health:	1
Flammability:	3
Reactivity:	0

NFPA



Notice to Reader:
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Ed Williams, Technical Manager
LPS Laboratories
A division of Illinois Tool Works

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