

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.13.2020

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PLM-201-SUB

SECTION 1: Identification

Product identifier

Product name: PLM-201-SUB

Recommended use of the product and restriction on use

Relevant identified uses: Add Detergent for Support Removal Machines

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

PostProcess Technologies, Inc.
2495 Main Street
Suite 615
Buffalo, NY 14214
1-866-430-5354

Emergency telephone number:

United States

PERS

1-800-633-8253 (US/Canada; 24 hours)

1-801-629-0667 (International; 24 hours)

Customer#: 11416

SECTION 2: Hazard(s) identification

GHS classification:

Skin corrosion, category 1A

Serious eye damage, category 1

Corrosive to metals, category 1

Acute toxicity (inhalation), category 4

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H332 Harmful if inhaled

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Precautionary statements:

- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P234 Keep only in original container
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P271 Use only outdoors or in a well-ventilated area
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P363 Wash contaminated clothing before reuse
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P310 Immediately call a POISON CENTER or doctor/physician
- P321 Specific treatment (see supplemental first aid instructions on this label)
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P390 Absorb spillage to prevent material-damage
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P405 Store locked up
- P406 Store in corrosive resistant container with a resistant inner liner
- P501 Dispose of contents/container in accordance with local regulation.

Hazards not otherwise classified: None

Supplemental label elements:

10 percent of the mixture consists of ingredient(s) of unknown acute inhalation toxicity

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1310-58-3	Potassium hydroxide	1-5
CAS number: 1300-72-7	Sodium xylenesulfonate	1-5
CAS number: 111-76-2	2-Butoxyethanol	1-5
CAS number: 68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	0.1-0.5

Additional Information:

The specific chemical identity and/or exact percentages (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200)

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance. Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment

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recommendations. Do not use the mouth to mouth method if victim has ingested or inhaled the product. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper device.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

After skin contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

After eye contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Products that are corrosive to metals are often corrosive to the skin, eyes and the respiratory tract. Acute inhalation exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).
Symptoms of exposure may be delayed.

Immediate medical attention and special treatment

Specific treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

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Specific hazards during fire-fighting:

Contact with metals may evolve flammable hydrogen gas. Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA with a full-face piece operated in positive pressure mode).

Special precautions:

DO NOT GET WATER INSIDE CONTAINERS. Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing. Avoid breathing dust, mist, vapor, fume, and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers. Notify authorities if product enters sewers or public waters
Prevent further leakage or spillage if safe to do so. Contain spilled material and prevent run-off onto ground or into water sources or sewers.

Methods and material for containment and cleaning up:

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Absorb on inert material and place in containers for disposal. Dispose of spilled/collected material in accordance with all federal, state and local regulations.

Reference to other sections:

For further information refer to section 7 and section 13.

For personal protection see section 8.

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid breathing dust/ fume/ gas/mist/vapors/spray. Keep away from all sources of ignition. Avoid contact with skin and eyes.

Wear gloves and eye protection when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

Avoid prolonged or repeated contact with skin, eyes and clothing . Wash hands and face thoroughly after working with material. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

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Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Potassium hydroxide	1310-58-3	TWA: 2 mg/m ³
	2-Butoxyethanol	111-76-2	8-Hour TWA: 20 ppm
NIOSH	Potassium hydroxide	1310-58-3	REL: 2 mg/m ³
	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	TWA: 5 ppm (REL (for up to a 10 hour work day))
	2-Butoxyethanol	111-76-2	TWA: 24 mg/m ³ (REL (for up to a 10 hour work day))
OSHA	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 25 ppm
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m ³
United States(California)	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 20 ppm (OSHA (California))
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m ³ (OSHA (California))

Biological limit values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	2-Butoxyethanol	111-76-2	Butoxyacetic acid (BAA) in urine (with hydrolysis) - (creatinine)	Creatinine in Urine	End of shift	200 mg/g

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) 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.

Personal protection equipment

Eye and face protection:

Tightly fitting safety goggles

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory protection. Respirator selection must be based on known or anticipated exposure level, the hazards of the product and the safe working limits of the selected respirator. Wear a properly fitted, air-purifying or air-fed respirator if exposure limits

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exceeded or irritation or other symptoms are experienced. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General hygienic 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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear colorless liquid.
Odor	Cleaner odor.
Odor threshold	Not applicable.
pH	13-14
Melting point/freezing point	-1°C (30°F)
Initial boiling point/range	No data available.
Flash point (closed cup)	Not applicable.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper flammability/explosive limit	Not applicable.
Lower flammability/explosive limit	Not applicable.
Vapor pressure	No data available.
Vapor density	No data available.
Density	No data available.
Relative density	1.09
Solubilities	Soluble in water.
Partition coefficient (n-octanol/water)	No data available.
Auto/Self-ignition temperature	No data available.
Decomposition temperature	No data available.
Dynamic viscosity	No data available.
Kinematic viscosity	No data available.
Explosive properties	Not explosive.
Oxidizing properties	None known.

Other information

Volatiles (% by weight)	75%
Volatile organic Compounds (VOC's)	10%

SECTION 10: Stability and reactivity

Reactivity:

Not normally reactive. May be corrosive to metals. Contact with most metals will generate flammable hydrogen gas.

Chemical stability:

Stable under recommended storage and handling conditions.

Possibility of hazardous reactions:

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Substance reacts with metals with evolution of highly flammable hydrogen. Reacts with water: (exothermic reaction). Risk of explosion in confined areas and in contact with incompatible materials.

Conditions to avoid:

Incompatible materials.

Keep away from heat/sparks/open flames/hot surfaces and ignition sources. - No smoking.

Incompatible materials:

Alkalis, combustible materials, organic materials, alcohols, organic solvents. Contact with metals may evolve flammable hydrogen gas. May intensify fire; oxidizer.

Hazardous decomposition products:

Carbon oxides.

Potassium Oxides

SECTION 11: Toxicological information

Acute toxicity

Assessment:

Harmful if inhaled.

Product data: No data available.

Substance data:

Name	Route	Result
Potassium hydroxide	oral	LD50 Rat: 333 mg/kg
2-Butoxyethanol	oral	LD50 Rat: 470 mg/kg
	dermal	LD50 Rabbit: 220 mg/kg
	inhalation	LC50 Rat: 450 ppmV (4H)

Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage.

Product data:

No data available.

Substance data:

Name	Result
Potassium hydroxide	Causes severe skin burns.
Sodium xylenesulfonate	Causes skin irritation.
2-Butoxyethanol	Causes skin irritation

Serious eye damage/irritation

Assessment:

Causes serious eye damage.

Product data:

No data available.

Substance data:

Name	Result
Potassium hydroxide	Causes serious eye damage.
Sodium xylenesulfonate	Causes serious eye irritation.
2-Butoxyethanol	Causes serious eye irritation

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Name	Result
Alcohols, C9-11, branched and linear, ethoxylated	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Sodium xylenesulfonate	Not Applicable
2-Butoxyethanol	Group 3

National Toxicology Program (NTP):

Name	Classification
Sodium xylenesulfonate	Not Applicable

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Sodium xylenesulfonate	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

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Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

Inhalation, Ingestion, Skin contact, Eye contact.

Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	EC50 Daphnia magna (Water flea): 1,550 mg/L (48 h)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	NOEC Brachydanio rerio: 100 mg/L (21 Days)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
2-Butoxyethanol	Readily biodegradable.
Alcohols, C9-11, branched and linear, ethoxylated	Based on the data above, alcohol ethoxylate (C9-11, < 2.5 EO) is considered rapidly biodegradable.

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Alcohols, C9-11, branched and linear, ethoxylated	Based on the data above, alcohol ethoxylate (C9-11, < 2.5 EO) is considered to have low potential for accumulation.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Since emptied

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containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Contaminated packages:


Not determined or not applicable.

SECTION 14: Transport information


United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Potassium hydroxide)
UN transport hazard class(es)	8 
Packing group	II
Environmental hazards	None
Special precautions for user	May be shipped as LIMITED QUANTITY when shipped in quantities no larger than 1.0 Liter, in packages not exceeding 30 kg. See packing instruction 173.202 for non-bulk packaging (119 gallons)

International Maritime Dangerous Goods (IMDG)

UN number	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Potassium hydroxide)
UN transport hazard class(es)	8 
Packing group	II
Environmental hazards	None
Special precautions for user	None
Limited quantity	May be shipped as LIMITED QUANTITY when shipped in quantities no larger than 1.0 Liter, in packages not exceeding 30 kg. See packing instruction P001 for non-bulk packaging (<119 gallons). See packing instruction IBC02 for IBC.

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Potassium hydroxide)
UN transport hazard class(es)	8 
Packing group	II
Environmental hazards	None
Special precautions for user	None
Passenger and cargo	See Packing Instruction 851 for Passenger aircraft (Net qty per inner 1 L/ 1 L Max Net Qty/Pkg) See Packing Instruction 855 for Cargo Aircraft (Net qty per inner 2.5 L/30 L Max Net Qty/Pkg)
Limited quantity	See Packing Instruction 851 for Passenger aircraft (Net qty per inner 1 L/ 1 L Max Net Qty/Pkg) See Packing Instruction 855 for Cargo Aircraft (Net qty per inner 2.5 L/30 L Max Net Qty/Pkg)

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SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

1310-58-3	Potassium hydroxide	Listed
1300-72-7	Sodium xylenesulfonate	Listed
111-76-2	2-Butoxyethanol	Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Listed

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals:

1310-58-3	Potassium hydroxide	Not Listed
1300-72-7	Sodium xylenesulfonate	Not Listed
111-76-2	2-Butoxyethanol	Not Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Not Listed

CERCLA:

1310-58-3	Potassium hydroxide	Listed	1000 lb
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RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

1310-58-3	Potassium hydroxide	Listed
1300-72-7	Sodium xylenesulfonate	Not Listed
111-76-2	2-Butoxyethanol	Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Not Listed

New Jersey Right to Know:

1310-58-3	Potassium hydroxide	Listed
1300-72-7	Sodium xylenesulfonate	Not Listed
111-76-2	2-Butoxyethanol	Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Not Listed

New York Right to Know:

1310-58-3	Potassium hydroxide	Listed
1300-72-7	Sodium xylenesulfonate	Not Listed
111-76-2	2-Butoxyethanol	Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Not Listed

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Pennsylvania Right to Know:

1310-58-3	Potassium hydroxide	Listed
1300-72-7	Sodium xylenesulfonate	Not Listed
111-76-2	2-Butoxyethanol	Listed
68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	Not Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-1

HMIS: 3-0-1

Initial preparation date: 02.13.2020

Revision Notes:

Revision Date	Notes
2020-02-13	SDS No. 200063
2020-02-13	Revision E

End of Safety Data Sheet