



Safety Data Sheet

Section 1: Identification

Product Identifier

Detergent

Product Name

Trade Name: Multi-Purpose Pressure Washer Cleaner

PN (Part number): 320017-35

Relevant identified uses of the substance or mixture and uses advised against

- Material for industrial applications
- Industrial and professional use
- Consumer end use

Details of the supplier of the safety data sheet

Manufacturer

SPLASH Products
51 E. Maryland Ave.
St. Paul, MN 55117
Phone: (651) 489-8211

Emergency telephone number

1-800-535-5053

Section 2: Hazard(s) Identification

OSHA/HCS status

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

Classification of the substance or mixture

Skin Corrosion/Irritation Category 1

Serious Eye Damage/Eye Irritation Category 1

Hazardous to the aquatic environment – Acute Category 3

GHS label elements

Hazard pictograms



Signal word-DANGER

Potassium Hydroxide

Hazard statements

Causes severe skin burns and eye damage

Causes serious eye damage

Harmful to aquatic life

Precautionary statements

Prevention

Wear protective gloves/protective clothing/eye protection/face protection.

Take off contaminated clothing and wash before use

Keep away from oxidizing materials and strong acids

Response

IF SWALLOWED: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth cautiously with water for several minutes. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

IF ON SKIN (or hair): Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

IF IN EYES: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

IF EXPOSED or CONCERNED:

Immediately call a POISON CENTER or a doctor/physician.

Storage

Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Product is stable.

Section 3: Composition/Information on Ingredients

Substance/mixture: Mixture

Chemical name: N/A

Other means of identification: No

CAS number/other identifiers

| Ingredient name | % | CAS number |
|---------------------|-----|------------|
| Potassium Hydroxide | <1 | 1310-58-3 |
| 2-butoxyethanol | 1.5 | 111-76-2 |

Section 4: First Aid Measurements

Description of necessary first aid measures

Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

Inhalation: Bring accident victims out into the fresh air. Call a physician immediately in severe cases or if recovery is not rapid.

Skin contact: After contact with skin, wash immediately with plenty of water. Remove contaminated clothing and wash before reuse.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

Can cause irritation to eyes and mucous membranes.

Inhalation

Sore throat, shortness of breath, coughing and congestion.

Skin contact

Causes skin irritation.

Ingestion

Irritation to mucous membranes.

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

Notes to physician

Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

Specific treatments

N/A

Protection of first-aiders

N/A

See toxicological information (Section 11)

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

SMALL FIRE: Use DRY chemical powder, CO₂ or appropriate foam.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Unsuitable extinguishing media

None known

Specific hazards arising from the chemical

Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes.

Hazardous thermal decomposition products/Products of combustion

Products of combustion are carbon oxides (CO, CO₂).

Special protective actions for fire fighters

Construct a dike to prevent spreading.

Special protective equipment for fire-fighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental precautions

Methods and materials for containment and cleaning up:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7: Handling and Storage

Precautions for safe handling

Protective measures, advice on general occupational hygiene and conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Do not breathe dust, fumes, gas, mist, vapors or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, and eye and face protection. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids.

Section 8: Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits | | | |
|-----------------|---------------------|--------|-------------------------------|--------|
| | ACGIH | | OSHA | |
| | (TWA) | (STEL) | (TWA) | (STEL) |
| Methanol | 2 mg/m ³ | N/A | 2 mg/m ³ | N/A |
| 2-butoxyethanol | (TWA) | (STEL) | (PEL) | (STEL) |
| | 20 ppm | N/A | 50 ppm; 240 mg/m ³ | N/A |

Appropriate engineering controls and Environmental exposure controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Individual protection measures

Hygiene measures

Wash at the end of each work shift and before eating, smoking or using the toilet

Eye/face protection: Use chemical safety goggles.

Skin protection

Hand protection and Body protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Other skin protection

Wash hands and other exposed areas with mild soap and water before eating or drinking.

Respiratory protection: No respiratory protection required under normal circumstances.

Respirator Type(s) (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full face piece particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, Glycerin, etc.) are present, use a NIOSH

type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

Section 9: Physical and Chemical Properties

Appearance

Physical state: Green Liquid

Odor: None

Odor threshold: Not determined

pH: 12.5-13.5

Specific Gravity: 1.010

Melting point: No Data Available

Boiling point: No Data Available

Flash point: No Data Available

Evaporation rate (BuAc=1): No Data Available

Flammability (solid, gas): No

Lower and upper explosive (flammable) limits: LEL 1.1%, UEL 10% (2-butoxyethanol)

Vapor pressure: No Data Available

Vapor density (Air=1): No Data Available

Solubility: Soluble in water

Partition coefficient: n-octanol/water: Not Established

Auto-ignition temperature: Not Applicable

Decomposition temperature: Not Established

Viscosity: Not determined

VOC%: 1.5

Section 10: Stability and Reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Will not occur.

Conditions to avoid

Avoid excessive heat, open flame or other sources of ignition.

Incompatible materials

Water-reactive materials, strong acids, Halogenated Hydrocarbons, copper alloys, maleic anhydride, oxidizing agents, materials reactive with hydroxyl compounds.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents.

Organic acids (i.e. acetic acid, citric acid etc.).

Sodium hypochlorite.

Hazardous decomposition products

Potassium Oxide, nitrogen oxides, carbon oxides, ammonia, aldehydes, nitrosamine.

Section 11: Toxicological Information

Information on toxicological effects**Acute toxicity**

| Product/ingredient name | Test | Results |
|-------------------------|--------------------------------------|-----------------------------|
| Potassium Hydroxide | Acute toxicity, oral (male rat) | LD50 = 214 mg/kg |
| | Acute toxicity, dermal | LD50 = 1,260 mg/kg |
| | Acute toxicity, inhalation (rat) | LC50 Rat: No Data Available |
| 2-butoxyethanol | Acute toxicity, oral (male rat) | LD50 = 1,300 mg/kg |
| | Acute toxicity, dermal | LD50 = >2000 mg/kg |
| | Acute toxicity, inhalation (rat, 3h) | LC50 = >4.9 mg/l |

Summary Comments:**Sensitization**

| Product/ingredient name | Test | Results | Basis |
|-------------------------|------|---------|-------------------------------------|
| Potassium Hydroxide | | | No evidence of sensitization effect |
| 2-butoxyethanol | | | No evidence of sensitization effect |

Summary Comments:**Carcinogenicity**

| Product/ingredient name | Test | Results | Basis |
|-------------------------|------|---------|---|
| Potassium Hydroxide | | | No known carcinogenic effects |
| 2-butoxyethanol | | | Based on available data the classification criteria are not met. Not classified as hazardous. |

Summary Comments:**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Test | Results | Basis |
|-------------------------|------|-------------------|-------|
| Potassium Hydroxide | | No Data Available | |

Summary Comments:**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name | Test | Results | Basis |
|-------------------------|------|-------------------|-------|
| Potassium Hydroxide | | No Data Available | |
| 2-butoxyethanol | | Not classified. | |

Summary Comments:**Aspiration hazard**

| Product/ingredient name | Test | Results | Basis |
|-------------------------|------|------------------------|-------------------------------|
| Potassium Hydroxide | | No Data Available | |
| 2-butoxyethanol | | Human exposure studies | Tolerance at 200 ppm/40 hours |

Summary Comments:

Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Information on the likely routes of exposure

Skin, eyes, Ingestion, inhalation.

Potential acute health effects

Eye contact: Corrosive to the eyes.

Inhalation: Vapors are corrosive.

Skin contact: Strongly corrosive. May cause deep tissue damage.

Ingestion: Causes severe burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Eye irritation.

Inhalation: After some hours, injured persons may develop serious shortness of breath and lung edema.

Skin contact: Skin irritation.

Ingestion: May irritate the gastrointestinal tract, cause nausea, and vomiting.

Potential chronic health effects (Potassium Hydroxide)

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Teratogenicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Developmental effects: No data available.

Fertility effects: Contains no ingredient listed as toxic to reproduction.

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| Section 12: Ecological Information |
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Toxicity

Acute Fish toxicity: (Potassium Hydroxide)

LC50 - *Gambusia affinis* (Mosquito fish) - 80 mg/l - 96 h

Acute Fish toxicity: (2-butoxyethanol)

LC50 - *Oncorhynchus mykiss* (rainbow trout) – 1,474 mg/l - 96 h

Acute toxicity for invertebrates: (2-butoxyethanol)

EC50 - *Daphnia magna* (Water flea) – 1,550 mg/l - 48 h

Acute toxicity for aquatic plants: (2-butoxyethanol)

EC-50 (Algae (*Pseudokirchneriella subcapitata*), 72 h): 1,840 mg/l

Ecotoxicology Assessment: (Potassium Hydroxide and 2-butoxyethanol)

Material is expected to be slightly harmful to aquatic life.

Persistence and degradability

Biodegradability: (Potassium Hydroxide)

The methods for determining the biological degradability are not applicable to inorganic substances

Biodegradability: (2-butoxyethanol)

90.4 % (28 d) readily biodegradable

Stability in water: (Potassium Hydroxide and 2-butoxyethanol)

No Data Available

Photodegradation: (Potassium Hydroxide and 2-butoxyethanol)

No data available

Volatility (Henry's Law constant): (Potassium Hydroxide and 2-butoxyethanol)

Partition coefficient n-octanol/water (log K_{ow}) = No Data Available

Bioaccumulative potential

Bioaccumulation: (Potassium Hydroxide and 2-butoxyethanol)

Potential to bioaccumulate is low.

Bioconcentration factor (BCF): No data available.

Mobility in soil: (Pressure Wash)

Distribution among environmental compartments:

Expected to partition to water.

Other adverse effects:

Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.

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| Section 13: Disposal Considerations |
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Disposal methods

Dispose in accordance with applicable international, national and local laws, ordinances and statutes.

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| Section 14: Transport Information |
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UN Number: N/A

DOT Proper Shipping Name: Limited Quantity, Consumer Commodity, ORM-D

Exemptions: Per 49 CFR 173.154 (pg III, inner package not over 5.0 L)

Transport hazard Class(es): N/A

Packing Group: N/A

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

Transport Hazard Class(es): N/A

Maritime Transport IMDG/GGVSea

Transport Hazard Class(es): N/A

Marine Pollutant: No

Air Transport ICAO-TI and IATA-DGR

Transport Hazard Class(es): N/A

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| Section 15: Regulatory Information |
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Chemical Inventory Status-Part 1

| Ingredient (CAS#) | TSCA | EC | Japan | Australia |
|---------------------------------|------|-----|-------|-----------|
| Potassium Hydroxide (1310-58-3) | Yes | Yes | Yes | Yes |

Chemical Inventory Status-Part 2

| Ingredient (CAS#) | Korea | Canada | Canada | Philippines |
|---------------------------------|-------|--------|--------|-------------|
| | | DSL | NDSL | |
| Potassium Hydroxide (1310-58-3) | Yes | Yes | No | Yes |

Federal, State & International Regulations-Part 1

| Ingredient (CAS#) | SARA 302 | | SARA 313 | |
|---------------------------------|----------|-----|---------------|----------|
| | RQ | TPQ | List Chemical | Category |
| Potassium Hydroxide (1310-58-3) | No | No | No | No |

Federal, State & International Regulations-Part 2

| Ingredient (CAS#) | RCRA | | TSCA |
|---------------------------------|----------|--------|------|
| | CERCLA | 261.33 | 8(d) |
| Potassium Hydroxide (1310-58-3) | 1000 lb. | No | No |

Chemical Weapons Convention: No

TSCA 12b: No

CDTA: No

SARA 311/312:

Acute: Yes, Chronic: Yes, Fire: No, Pressure: No, Reactivity: Yes

Mixture/Liquid

Australian Hazchem Code: 2R

Poison Schedule: S6

Section 16: Other Information

History

Date of issue: 04/17/15

Version: 1a

Revised Sections(s): New

Prepared by: Andrew Gioino, SPLASH PRODUCTS

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 the 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.