SAFETY DATA SHEET

Issue Date 02-01-2018 **Revision Date** 02-01-2018 **Version** 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: A.P.C. ALL-PURPOSE CLEANER

Other means of identification

Common Name: 4126
UN/ID No UN3266
Synonyms None
Product Categories Cleaner, Alkaline

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address
MOC PRODUCTS CO., INC.
12306 Montague Street
Pacoima, CA 91331

Emergency telephone number

Company Phone Number MOC PRODUCTS CO., INC. (818) 794-3500
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Flammable liquids	Category 4
Corrosive to metals	Category 1

Label elements

Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage
Combustible liquid
May be corrosive to metals

Appearance Aqueous solution, Alkaline **Physical state** Liquid **Odor** Citrus

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep only in original container

Precautionary Statements - Response
Immediately call a POISON CONTROL CENTER or doctor/physician
Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CONTROL CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CONTROL CENTER or doctor/physician
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam for extinction
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool
Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

• May be harmful if swallowed

6.47 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
2-Butoxyethanol	111-76-2	5-10	*
Sodium Metasilicate	6834-92-0	3-7	*
Sodium Tripolyphosphate	7758-29-4	1-5	*
C8-10 Ethoxylate Phosphate	68130-47-2	1-5	*
Dicarboxylic fatty acid	53980-88-4	1-3	*
Potassium Hydroxide	1310-58-3	1-3	*
Alcohols, C9-11, Ethoxylated	68439-46-3	0-3	*
Alcohols, C10-16, Ethoxylated	68002-97-1	0-3	*
Alcohols, C10-14, Ethoxylated	66455-15-1	0-3	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice Immediately call a POISON CONTROL CENTER or doctor/physician.

Skin contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention/advice.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion Do not induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Causes eye burns, Causes skin burns, Cough, Difficulty in breathing, Dizziness, Headache, Nausea, Vomiting.

Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider Avoid contact with skin. Avoid breathing vapors or mists.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO2, water spray (fog) or alcohol resistant foam.

Small Fire Dry chemical or CO2.

Large Fire Water spray or fog; Alcohol resistant foam.

Explosive properties: May form explosive peroxides. May form explosive mixtures in presence of oxidizing

substances (gas/dust). Vapors may form explosive mixture with air. Contact with some metals (particularly magnesium, aluminum, and galvanized zinc) can rapidly generate hydrogen which is explosive.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. May form explosive peroxides. COMBUSTIBLE MATERIAL: May be ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Contact with metals may evolve flammable hydrogen gas. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons, Aldehydes, Silicon dioxide, Toxic gases and fumes.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes: May be ignited by heat, sparks or flames.

Special firefighting procedures:

Combustible liquid. No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Keep away from heat, sparks and flame. Water mist may be used to cool closed containers. In a fire or if heated, a pressure increase will occur and container may burst. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. In the event of fire and/or explosion do not breathe fumes.

Component	ACGIH - test
2-Butoxyethanol 111-76-2 (5-10)	200

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Avoid contact with skin, eyes and clothing. Ventilate closed spaces before entry. Remove all sources of ignition. Pay attention to flashback. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use spark-proof tools and explosion-proof equipment. Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment.

For emergency responders Use personal protection recommended in Section 8. Ventilate the area. Remove all sources of ignition.

Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Avoid subsoil penetration. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Methods for Containment Ventilate the area. Remove all sources of ignition. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Use non-sparking tools.

Methods for clean-up: Clean-up methods - small spillage: Ventilate the area. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Clean-up methods - large spillage: Large spills present a vapor explosion and liquid fire hazard; evacuate area and ensure response by personnel trained and equipped to respond to flammable material incident or off-site emergency responders or fire department. Dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Protect from physical damage. Protect from freezing (<0°C, or 32°F). Do not store at temperatures above 120°F (50°C). Do not store in open or unlabeled containers. Keep product and empty container away from heat and sources of ignition. Store in a cool, well ventilated area. Wear personal protective equipment. Avoid breathing vapors or mists. Do not get in eyes, on skin, or on clothing. Keep away from any incompatible materials (See Section 10). Take precautionary measures against static discharge. Empty containers retain product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

Conditions for safe storage, including any incompatibilities

Technical measures/precautions: When preparing the working solution ensure that there is adequate ventilation. Mechanical ventilation required if used indoors on a continuous basis. Eye wash and safety shower should be easily accessible.

Materials to avoid: Strong oxidizing agents, Alkali metals, Organic materials, Copper. Reacts violently with: Halogens, Magnesium, Azides, Nitro compounds. Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m³ TWA: 25 ppm TWA: 120 mg/m³	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m³
Sodium Metasilicate 6834-92-0	-	Not established	-
Sodium Tripolyphosphate 7758-29-4	-	Not established	-
C8-10 Ethoxylate Phosphate 68130-47-2	-	Not established	-
Dicarboxylic fatty acid 53980-88-4	-	Not established	-
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m³	Not established	Ceiling: 2 mg/m³
Alcohols, C9-11, Ethoxylated 68439-46-3	-	Not established	-
Alcohols, C10-16, Ethoxylated 68002-97-1	-	Not established	-
Alcohols, C10-14, Ethoxylated 66455-15-1	-	Not established	-

Appropriate engineering controls

Engineering measures: When preparing the working solution ensure that there is adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit values. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles); Face protection shield.

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

Respiratory protection Ensure adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEX (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Use personal protective equipment. Wear safety glasses with side shields (or goggles), Face protection shield. Avoid contact with skin and clothing. Avoid breathing vapors or mists.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Aqueous solution, Alkaline	**Odor**	Citrus
Color	Clear Orange	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	13-14	
Melting point/freezing point	<= 0 °C / 32 °F	(based on components)
Boiling point / boiling range	> 99 °C / 211 °F	(based on components)
Flash point	67 °C / 153 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	Slower than ether	Slower than ether
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No Data Available	
Lower flammability limit	No Data Available	
Vapor pressure	No Data Available	
Vapor density	Heavier than air	
Specific Gravity	1.06	
Water solubility	Soluble in water	
Solubility in other solvents	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Kinematic viscosity	No information available	
Dynamic viscosity	No Data Available	
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	

Other information

Softening point	No Data Available
Molecular weight	No Data Available
VOC Content (%)	
VOC Content (%)	6.7
Density	1.06 g/cc
Bulk density	No Data Available

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Stable under normal conditions.

Chemical stability

Possibility of Hazardous Reactions Contact with metals (aluminum, zinc, tin) may release hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts. May form explosive peroxides.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

Materials to avoid: Strong oxidizing agents, Alkali metals, Organic materials, Copper. Reacts violently with: Halogens, Magnesium, Azides, Nitro compounds. Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds

causes formation of shock-sensitive salts.

Hazardous Decomposition Products

Hazardous Decomposition Products Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons, Aldehydes, Silicon dioxide. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Causes severe skin burns and eye damage. May be harmful if swallowed.

Inhalation Vapors may be irritating to eyes, nose, throat, and lungs. In high concentrations: Inhaled corrosive substances can lead to a toxic edema of the lungs.

Eye contact Causes serious eye damage. Causes burns.

Skin Contact The product causes burns of eyes, skin and mucus membranes.

Ingestion May be harmful if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Sodium Metasilicate 6834-92-0	= 1153 mg/kg (Rat)	-	-
Sodium Tripolyphosphate 7758-29-4	= 3120 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
C8-10 Ethoxylate Phosphate 68130-47-2	-	-	-
Dicarboxylic fatty acid 53980-88-4	=6176 mg/kg (Rat)	-	-
Potassium Hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Alcohols, C9-11, Ethoxylated 68439-46-3	>2000 mg/kg (Rat)	3300 mg/kg (Rat)	-
Alcohols, C10-16, Ethoxylated 68002-97-1	>1400 mg/kg (Rat)	2000 mg/kg (Rat)	-
Alcohols, C10-14, Ethoxylated 66455-15-1	1000-2000 = mg/kg(Rat)	>4000 = mg/kg(Rat)	>1600 = mg/m^3(Rat)

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Skin Sensitization: Not expected. Respiratory Sensitization: Not classified.

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

Carcinogenicity Category 3: Not Classifiable.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2		Group 3		

Reproductive toxicity Product is or contains a chemical or chemicals which is/are (a) known or suspected reproductive hazard(s): 2-Butoxyethanol (CAS#111-76-2).

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Chronic toxicity Experiments have shown reproductive toxicity effects on laboratory animals: 2-Butoxyethanol (CAS#111-76-2).

Target Organ Effects Eyes, Skin, Respiratory system, Liver, Blood, Central nervous system, Testes.

Neurological effects Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Other adverse effects No information available.

Aspiration hazard Risk of serious damage to the lungs (by aspiration). This material, if ingested or vomited can cause lung injury.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 6.47 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	3951 mg/kg
ATEmix (dermal)	15470 mg/kg
ATEmix (inhalation-dust/mist)	23.1 mg/l
ATEmix (inhalation-vapor)	6923 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

9.47 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Butoxyethanol 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Sodium Metasilicate 6834-92-0		210: 96 h Brachydanio rerio mg/L LC50 semi-static 210: 96 h Brachydanio rerio mg/L LC50		
Dicarboxylic fatty acid 53980-88-4	=62.9 mg/l EC50 72 h (Algae)	= 15 mg/L LC50 96 h (Pimephales promelas)		= 22.5 mg/l (Daphnia) 48 h LC50
Alcohols, C9-11, Ethoxylated 68439-46-3		8.5 mg/l (96h) Pimephales promelas		5.3 mg/l (48h) Daphnia magna
Alcohols, C10-16, Ethoxylated 68002-97-1		1 : 96 h Pimephales promelas mg/L LC50		0.46: Daphnia magna mg/L LC50
Alcohols, C10-14, Ethoxylated 66455-15-1	15 = mg/l, EC50 72h	14-15 = mg/l EC50 96h		5-6 = mg/l EC50 48h Daphnia magna

Persistence and degradability
No information available.

Bioaccumulation
Bioaccumulative potential.

Mobility
Soluble in water.

Chemical Name	Partition coefficient
2-Butoxyethanol 111-76-2	0.83
Dicarboxylic fatty acid 53980-88-4	7.09

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Do not reuse container. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Limited quantity (LQ) < 1 Liter

DOT

UN/ID No	UN3266
Proper Shipping Name:	Corrosive liquids, basic, inorganic, n.o.s. (Potassium Hydroxide, Sodium Metasilicate)
Hazard Class	8
Packing Group:	II
Emergency Response Guide Number	154

IATA

UN/ID No	UN3266
Proper Shipping Name:	Corrosive liquids, basic, inorganic, n.o.s. (Potassium Hydroxide, Sodium Metasilicate)
Hazard Class	8
Packing Group:	II

IMDG

UN/ID No	UN3266
Proper Shipping Name:	Corrosive liquids, basic, inorganic, n.o.s. (Potassium Hydroxide, Sodium Metasilicate)
Hazard Class	8
Packing Group:	II

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Weight %	SARA 313 - Threshold Values %
2-Butoxyethanol 111-76-2	111-76-2	5-10	1.0 % de minimis concentration

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium Hydroxide 1310-58-3	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium Hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

State Regulations (RTK)

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Ethylene glycol	107-21-1	Developmental
Ethylene oxide	75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
Formaldehyde	50-00-0	Carcinogen

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Rating
Health hazards 3
Flammability 2
Instability 1
Physical and Chemical Properties -
HMIS Rating
Health hazards 3*
Flammability 2
Physical hazards 1
Personal protection D, q
Chronic Hazard Star Legend ** = Chronic Health Hazard*

Prepared by Environmental Health and Safety Department
Issue Date 02-01-2018
Revision Date 02-01-2018
Revision Note
This data sheet contains changes from the previous version in section(s): 15.
Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet