

## Safety Data Sheet

Issue date: 30.03.2022

v 1

Last Revision Date: 10.04.2017

## 1 Identification

- **Product identifier**

- **Trade name: AFM Flushing solution**

- **Part number:** AFMFS

- **Application of the substance / the mixture**

- Cleaning solution for flushing mobile air conditioning applications

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

- CPS Products Inc.
    - 1010 East 31st Street
    - Hialeah, FL 33013, USA
    - Tel: 305 687 4121
    - Fax: 305 687 3743

- **email of person responsible:**

- cs@cpsproducts.com

- **Emergency telephone number:**

- CHEMTREC International +1 (703) 527-3887 (outside the US), 1-800-424-9300 (in the US) 24 hr

## 2 Hazard(s) identification

- **Classification of the substance or mixture**

- Flammable Liquids 3 H226 Flammable liquid and vapor.

- Skin Irritation 2 H315 Causes skin irritation.

- Sensitization - Skin 1 H317 May cause an allergic skin reaction.

- Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.

- Aquatic Acute 2 H401 Toxic to aquatic life.

- Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- **Label elements**

- **GHS label elements**

- The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



- **Signal word** Danger

- **Hazard-determining components of labeling:**

- Distillates (petroleum), hydrotreated light

- Citrus spp.

- **Hazard statements**

- Flammable liquid and vapor.

- Causes skin irritation.

- May cause an allergic skin reaction.

- May be fatal if swallowed and enters airways.

- Toxic to aquatic life.

- Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

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

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Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

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

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents in accordance with local regulations.

- **Other hazards**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

**3 Composition/information on ingredients**

- **Chemical characterization: Mixtures**

- **Chemical components:**

64742-47-8	Distillates (petroleum), hydrotreated light	75-100%
94266-47-4	Citrus spp.	≤25%
111-76-2	2-butoxyethanol	≤10%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

**4 First-aid measures**

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:** Treat Symptomatically

- **Most important symptoms and effects, both acute and delayed**

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

See section 11.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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**5 Fire-fighting measures**

- **Extinguishing media**
  - **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
  - **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture** See section 10 for additional information.
- **Advice for firefighters**
  - **Protective equipment:**  
Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.  
Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.  
Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **Handling:**
  - **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
  - **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:**  
See section 10 for incompatible materials.
    - **Information about storage in one common storage facility:** Not required.

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- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**· **Control parameters**· **Components with limit values that require monitoring at the workplace:****64742-47-8 Distillates (petroleum), hydrotreated light (50-100%)**

EL (Canada)	TWA: 200 mg/m <sup>3</sup> Skin
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**111-76-2 2-butoxyethanol (2.5-10%)**

PEL (USA)	TWA: 240 mg/m <sup>3</sup> , 50 ppm Skin
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REL (USA)	TWA: 24 mg/m <sup>3</sup> , 5 ppm Skin
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TLV (USA)	TWA: 97 mg/m <sup>3</sup> , 20 ppm BEI
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EL (Canada)	TWA: 20 ppm
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EV (Canada)	TWA: 20 ppm Skin
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· **Ingredients with biological limit values:****111-76-2 2-butoxyethanol (2.5-10%)**

BEI (USA)	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
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- **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Chemical resistant protective gloves

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## · Eye protection:



Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

· Form: Fluid

· Color: According to product specification

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

#### · Change in condition

· Melting point/Melting range: Undetermined.

· Boiling point/Boiling range: Undetermined.

· Flash point: 55 °C

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

#### · Explosion limits:

· Lower: Not determined.

· Upper: Not determined.

· Vapor pressure: Not determined.

· Density: Not determined.

· Relative density at 20 °C: 0.8070

· Vapor density: Not determined.

· Evaporation rate: Not determined.

#### · Solubility in / Miscibility with

· Water: Partially miscible.

· Partition coefficient (n-octanol/water): Not determined.

#### · Viscosity:

· Dynamic: Not determined.

· Kinematic at 40 °C: 3 cSt

#### · Solvent separation test

· VOC content: 10.0 %

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· **Other information**

No further relevant information available.

**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:**  
Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, open flames, sparks.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** May include, and are not limited to: oxides of carbon.

**11 Toxicological information**· **Information on toxicological effects**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:****ATE (Acute Toxicity Estimate)**

Dermal	LD50	20000 mg/kg (gpg)
Inhalative	LC50/4 h (vapor)	115 mg/L (gpg)

**111-76-2 2-butoxyethanol**

Oral	LD50	1414 mg/kg (gpg)
Dermal	LD50	2000 mg/kg (gpg)
Inhalative	LC50/4 h (vapor)	11.5 mg/L (gpg)

· **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

· **IARC (International Agency for Research on Cancer)**

111-76-2	2-butoxyethanol	3
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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**12 Ecological information**

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
  - **Remark:** Very toxic for fish
- **Additional ecological information:**
  - **General notes:**
    - Water hazard class 3 (Self-assessment): extremely hazardous for water
    - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    - Danger to drinking water if even extremely small quantities leak into the ground.
    - Also poisonous for fish and plankton in water bodies.
    - Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
- **Other adverse effects** Avoid release to the environment.

**13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:**
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

- |                                  |  |
|----------------------------------|--|
| · <b>UN-Number</b>               |  |
| · <b>DOT, ADR, IMDG, IATA</b>    | UN1993   |
| · <b>TDG</b>                     | UN1993   |
| · <b>UN proper shipping name</b> |  |
| · <b>DOT</b>                     | Flammable liquids, n.o.s. (Distillates (petroleum), hydrotreated light, Citrus spp.) |
| · <b>TDG</b>                     | FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, Citrus spp.). |

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· <b>IMDG</b>	FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, Citrus spp.), MARINE POLLUTANT
· <b>IATA</b>	FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, Citrus spp.)
· <b>Transport hazard class(es)</b>	
· <b>DOT</b>	
	
· <b>Class</b>	3 Flammable liquids
· <b>Label</b>	3
· <b>TDG</b>	
· <b>Class</b>	3 Flammable liquids
· <b>Label</b>	3
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	3 Flammable liquids
· <b>Label</b>	3
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	III
· <b>TDG</b>	III
· <b>Environmental hazards:</b>	Product contains environmentally hazardous substances: Citrus spp.
· <b>Marine pollutant:</b>	Yes (DOT)
· <b>Special precautions for user</b>	Warning: Flammable liquids
· <b>Hazard identification number (Kemler code):</b>	30
· <b>EMS Number:</b>	F-E, S-E
· <b>Stowage Category</b>	A
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L

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· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT, CITRUS SPP.), 3, III

**15 Regulatory information**· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No REACH Annex XVII restrictions

Contains no REACH candidate substance

· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

111-76-2 | 2-butoxyethanol

· **TSCA (Toxic Substances Control Act):**

64742-47-8 | Distillates (petroleum), hydrotreated light

94266-47-4 | Citrus spp.

111-76-2 | 2-butoxyethanol

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

111-76-2 | 2-butoxyethanol

NL

· **TLV (Threshold Limit Value)**

111-76-2 | 2-butoxyethanol

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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· **Canadian substance listings:**

· <b>Canadian Domestic Substances List (DSL)</b>	
All ingredients are listed.	
· <b>Canadian Ingredient Disclosure list (limit 0.1%)</b>	
None of the ingredients is listed.	
· <b>Canadian Ingredient Disclosure list (limit 1%)</b>	
111-76-2	2-butoxyethanol

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** Engineering Department

· **Issue Date**

10.04.2017

08/MAY/2017

· **Revision Changes:** v 1.0 - initial SDS release (08/MAY/2017)

· **Abbreviations and acronyms:**

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

Flammable Liquids 3: Flammable liquids – Category 3

Skin Irritation 2: Skin corrosion/irritation – Category 2

Sensitization - Skin 1: Skin sensitisation – Category 1

Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

NA