

Safety Data Sheet
acc. to OSHA 29 CFR 1910.1200 HCS

Issue date: 10/05/2015

v 1

Last Revision Date: 12/05/2014

1 Identification

- **Product identifier**

- **Trade name: Optima eBOOST AC/R Acid Neutralizer**

- **Part number:** OPEBA6S

- **Application of the substance / the mixture** air conditioning additive

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

- **Manufacturer/Supplier:**

CPS Products

1010 East 31st Street,

Hialeah, Florida, 33013

U.S.A.

Tel: 305-687-4121, 1-800-277-3808

E-mail: info@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**

Flam. Liq. 3 H226 Flammable liquid and vapor.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements**

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

- **Hazard pictograms**



GHS02 GHS05

- **Signal word** Danger

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

butan-1-ol

- **Hazard statements**

Flammable liquid and vapor.

Causes serious eye damage.

- **Precautionary statements**

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

Wear protective gloves / eye protection / face protection.

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 CENTER/doctor.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

| | | |
|------------|---|----------------|
| HEALTH | 2 | Health = 2 |
| FIRE | 2 | Fire = 2 |
| REACTIVITY | 0 | Reactivity = 0 |

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following hazardous components.

· **Chemical components:**

| | | |
|---------|------------|---------|
| 71-36-3 | butan-1-ol | 75-<10% |
|---------|------------|---------|

4 First-aid measures

· **Description of first aid measures**

- **After inhalation:** Not Applicable
- **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:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** See section 11.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

- **Suitable extinguishing agents:** CO₂, 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.

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- **Environmental precautions:**
Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.
 - **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:**

71-36-3 butan-1-ol (5-<10%)

PEL TWA: 300 mg/m³, 100 ppm

REL CEV: 150 mg/m³, 50 ppm
Skin

TLV TWA: 61 mg/m³, 20 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.
Avoid contact with the eyes.

- **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.

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· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Chemical resistant protective gloves

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **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:**

Amber colored

· **Odor:**

Alcohol-like

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

116 °C

· **Flash point:**

45 °C

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

340 °C

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

· **Lower:**

Not determined.

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| | |
|---|--|
| · Upper: | Not determined. |
| · Vapor pressure: | Not determined. |
| · Density: | Not determined. |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with | |
| · Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| · Dynamic: | Not determined. |
| · Kinematic: | Not determined. |
| · Solvent content: | |
| · Organic solvents: | 6.0 % |
| · VOC content: | 6.0 % |
| · 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: | | |
| Oral | LD50 | 13167 mg/kg (rat) |
| Dermal | LD50 | 56667 mg/kg (rabbit) |

| | | |
|---------------------------|------------------|---------------------|
| 71-36-3 butan-1-ol | | |
| Oral | LD50 | 790 mg/kg (rat) |
| Dermal | LD50 | 3400 mg/kg (rabbit) |
| Inhalative | LC50/4 h (vapor) | 8000 mg/L (rat) |

- **Primary irritant effect:**
 - **on the skin:**
May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.

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· **Additional toxicological information:**

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

Irritant

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

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.

14 Transport information

· **UN-Number**

· **DOT**

UN1993

· **IMDG, IATA**

UN1120

· **UN proper shipping name**

· **DOT**

Flammable liquids, n.o.s. (Butanols)

· **IMDG, IATA**

BUTANOLS mixture

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· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids
· **Label** 3

· **IMDG, IATA**



· **Class** 3 Flammable liquids
· **Label** 3

· **Packing group**

· **DOT, IMDG, IATA** III

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):** 30

· **EMS Number:** F-E,S-D

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

· **IMDG**

· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **Size/package type:**

LTD QTY, Consumer Commodity, ORM-D (42 mL/syringe)

· **UN "Model Regulation":**

UN 1120 BUTANOLS MIXTURE, 3, III

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15 Regulatory information

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

· **Sara**

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

None of the ingredients is listed.

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

71-36-3 butan-1-ol

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

All ingredients are listed.

· **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)**

71-36-3 butan-1-ol

D

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Hazard pictograms**



GHS02 GHS05

· **Signal word** Danger

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

butan-1-ol

· **Hazard statements**

Flammable liquid and vapor.
Causes serious eye damage.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wear protective gloves / eye protection / face protection.
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 CENTER/doctor.

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Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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** October 5, 2015

· **Revision Changes:** v 1.0 - original SDS release (October 5, 2015)

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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