

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2018

Reviewed on 07/23/2018

## 1 Identification

- **Product identifier**
- **Trade name:** **BullFrog 97046 Fuel System Additive**
- **Application of the substance / the mixture**  
Fuel additive  
Corrosion inhibitors
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Cortec Corporation  
4119 White Bear Parkway  
St. Paul, MN 55110 USA  
Phone (651) 429-1100  
Fax (651) 429-1122
- **Information department:** compliance@cortecvci.com
- **Emergency telephone number:**  
Spill, Leak, Fire, Exposure, or Accident  
24 hour CHEMTREC contact:  
USA and Canada 1-800-424-9300  
International +1-703-527-3887 (collect calls accepted)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Flam. Liq. 4 H227 Combustible liquid.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Distillates (petroleum), hydrotreated light
- **Hazard statements**  
Combustible liquid.  
May be fatal if swallowed and enters airways.
- **Precautionary statements**  
Keep away from flames and hot surfaces. – No smoking.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Immediately call a poison center/doctor.  
Do NOT induce vomiting.  
In case of fire: Use for extinction: CO2, powder or water spray.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 64742-47-8 EC number: 917-488-4	Distillates (petroleum), hydrotreated light ☠ Asp. Tox. 1, H304	50-100%
CAS: 5131-66-8 EINECS: 225-878-4	3-butoxypropan-2-ol ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227	≥2.5-<10%

- **Additional information**

In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR 1910.1200), the specific chemical identity and/or exact percentage composition has been withheld as a trade secret.  
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; consult doctor in case of complaints.
- **After skin contact**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Do not induce vomiting. Immediately call a poison center or a doctor/physician.
- **Information for doctor** Show this safety data sheet to the doctor in attendance.
- **Most important symptoms and effects, both acute and delayed**  
The symptoms and effects are as expected from the hazards shown in section 2. No specific product related symptoms are known.
- **Indication of any immediate medical attention and special treatment needed**  
If swallowed or in case of vomiting, danger of entering the lungs

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters** Self-contained breathing apparatus
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

- **Environmental precautions:**

Do not allow undiluted product to enter sewers/surface or ground water

Prevent seepage into sewage system, workpits and cellars.

- **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.

- **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.

· **Information about protection against explosions and fires:** Protect from heat.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Use only receptacles specifically permitted for this substance/product.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidizing agents.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

- **Storage class 10**

- **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:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

**64742-47-8 Distillates (petroleum), hydrotreated light (50-100%)**

RCP-TWA	Long-term value: 1200 mg/m <sup>3</sup>
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	Total Hydrocarbons
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- **Additional information:** The lists that were valid during the creation were used as basis.

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- **Exposure controls** Use local exhaust ventilation to control airborne concentrations below exposure limits.
- **Personal protective equipment**
- **General protective and hygienic measures**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Do not inhale gases / fumes / aerosols.
- **Breathing equipment:**  
 Suitable respiratory protective device recommended.  
 Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). To determine the appropriate type of respiratory protection that should be used, a hazard assessment should be performed prior to using the product. Environmental conditions such as ventilation and other contaminants may affect the type of respiratory protection that is chosen.
- **Protection of hands:**  
 Protective gloves  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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.
- **Protective Gloves** I.E., Nitrile, Viton, Neoprene
- **Eye protection:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

- |  |  |
|--|--|
| · <b>Information on basic physical and chemical properties</b> |  |
| · <b>General Information</b>                                   |  |
| · <b>Appearance:</b>   |  |
| Form:  | Liquid   |
| Color:   | Yellow   |
| Odor:  | Characteristic   |
| Odor threshold:  | Not determined.  |
| pH-value:  | Not determined.  |
| · <b>Change in condition</b>                                   |  |
| Melting point/Melting range:                                   | undetermined   |
| Boiling point/Boiling range:                                   | 170.1 °C (338.2 °F) (*)  |
| Flash point:   | 77 °C (170.6 °F)   |
| Flammability (solid, gaseous)                                  | Not applicable.  |
| Ignition temperature:  | 210 °C (410 °F) (*)  |
| 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. |
| · <b>Explosion limits:</b>                                     |  |
| Lower:   | 0.6 Vol % (*)  |
| Upper:   | 5 Vol % (*)  |

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· Vapor pressure at 20 °C (68 °F):	0 hPa (0 mm Hg) (*)
· Density at 20 °C (68 °F):	0.80-0.83 g/cm <sup>3</sup> (6.7-6.9 lbs/gal)
· Relative density	Not determined.
· Vapor 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 at 40 °C (104 °F):	12.19 mm <sup>2</sup> /s
· Solvent content:	
VOC Content:	0.0 g/l / 0.00 lb/gal
· Other information	The above data are typical values and do not constitute a specification. *Properties have been calculated.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under recommended storage conditions
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** High temperatures, sparks, and open flames.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

### · LD/LC50 values that are relevant for classification:

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

Oral	LD50	>5,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rabbit)

#### 5131-66-8 3-butoxypropan-2-ol

Oral	LD50	3,300 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC0	>651 mg/l (Rat) (4 hours)

#### 101-83-7 dicyclohexylamine

Oral	LD50	373 mg/kg (Rat)
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- **Primary irritant effect:**
- **on the skin:** Based on available data, the classification criteria are not met.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

- **Carcinogenic categories**

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

IARC Category 3 : Not classifiable as to its carcinogenicity to humans

- **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:**

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

Oral	LL50	25 mg/l (Oncorhynchus mykiss (rainbow trout)) (96 hours)
	LC50	2.9 mg/l (Oncorhynchus mykiss (rainbow trout)) (96 hours)

**101-83-7 dicyclohexylamine**

LC50	0.38 mg/l (Desmodesmus subspicatus) (72 Hours)
	62 mg/l (Danio rerio) (96 hours)
	12 mg/l (Oryzias latipes) (96 hours)
EC50	8 mg/l (Daphnia) (48 Hours)
EC50/21 D	0.14 mg/l (Daphnia) (21 days)
LOEC	0.049 mg/l (Daphnia) (21 days)
NOEC	0.016 mg/l (Desmodesmus subspicatus) (72 Hours)
	0.016 mg/l (Daphnia) (21 days)

- **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.

- **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** Dispose of in accordance with local, state, and federal regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

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## 14 Transport information

<b>· UN-Number</b>	Void
<b>· DOT, ADR, ADN, IMDG, IATA</b>	Void
<b>· UN proper shipping name</b>	Void
<b>· DOT, ADR, ADN, IMDG, IATA</b>	Void
<b>· Transport hazard class(es)</b>	Void
<b>· DOT, ADR, ADN, IMDG, IATA</b>	Void
<b>· Class</b>	Void
<b>· Packing group</b>	Void
<b>· DOT, ADR, IMDG, IATA</b>	Void
<b>· Environmental hazards:</b>	Not applicable.
<b>· Special precautions for user</b>	Not applicable.
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	Void

## 15 Regulatory information

<b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>· Sara</b>	
<b>· SARA Section 355 (extremely hazardous substances)</b>	None of the ingredients is listed.
<b>· SARA Section 313 (specific toxic chemical listings)</b>	None of the ingredients is listed.
<b>· TSCA (Toxic Substances Control Act) (Substances not listed)</b>	All ingredients are listed.
<b>· Proposition 65</b>	
<b>· Prop 65 - Chemicals known to cause cancer</b>	None of the ingredients is listed.
<b>· Chemicals known to cause reproductive toxicity for females</b>	None of the ingredients is listed.
<b>· Chemicals known to cause reproductive toxicity for males</b>	None of the ingredients is listed.
<b>· Chemicals known to cause developmental toxicity</b>	None of the ingredients is listed.
<b>· Cancerogenity categories</b>	
<b>· EPA (Environmental Protection Agency)</b>	None of the ingredients is listed.
<b>· NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	None of the ingredients is listed.

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**· Canadian Domestic Substances List (DSL) (Substances not listed)**

aliphatic amine compounded with fatty acid

**· Philippines Inventory of Chemicals and Chemical Substances (Substances not listed)**

aliphatic amine compounded with fatty acid

**· Chinese Chemical Inventory of Existing Chemical Substances (Substances not listed)**

All ingredients are listed.

**· Australian Inventory of Chemical Substances (Substances not listed)**

aliphatic amine compounded with fatty acid

**· New Zealand Inventory of Chemicals (Substances not listed)**

aliphatic amine compounded with fatty acid

**· Existing Chemical Substances (Substances not listed)**

Distillates (petroleum), hydrotreated light

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

**· Hazard pictograms**


GHS08

**· Signal word** Danger

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

Distillates (petroleum), hydrotreated light

**· Hazard statements**

Combustible liquid.

May be fatal if swallowed and enters airways.

**· Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

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

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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.

Cortec Corporation does not warrant any translation of this SDS not created by Cortec Corporation.

**· Date of preparation / last revision** 07/24/2018 / -

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European 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

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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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Asp. Tox. 1: Aspiration hazard – Category 1

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