

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

1 Identification

- **Product identifier**
- **Trade name:** BullFrog 92381 Electronic Cleaner
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** 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:** regulatory@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**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS08 Health hazard

STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure.

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**

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

(Contd. on page 2)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 1)

Hazard pictograms


GHS02 GHS04 GHS07 GHS08

Signal word Danger

Hazard-determining components of labeling:

Solvent naphtha (petroleum), medium aliph.

Hazard statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes skin irritation.

Causes serious eye irritation.

Causes damage to the central nervous system through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Precautionary statements

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

If swallowed: Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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

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: 64742-88-7 EINECS: 265-191-7	Solvent naphtha (petroleum), medium aliph. ☠ STOT RE 1, H372; Asp. Tox. 1, H304; Flam. Liq. 4, H227	50-100%
CAS: 5131-66-8 EINECS: 225-878-4	3-butoxypropan-2-ol ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Flam. Liq. 4, H227	10-25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane ⚠ Flam. Gas 1, H220; ⚡ Press. Gas, H280	10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied ⚠ Flam. Gas 1, H220; ⚡ Press. Gas, H280	10-25%
CAS: 29385-43-1 EINECS: 249-596-6	Alkyltriazole ☠ Acute Tox. 3, H311; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	≤ 2.5%

Additional information For the wording of the listed risk phrases refer to section 16.

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 2)

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.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label
Rinse out mouth and then drink plenty of water. Do not induce vomiting.

· Information for doctor

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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.

Water with full jet.

- **Special hazards arising from the substance or mixture** Carbon monoxide (CO)

6 Accidental release measures

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



Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**

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**
Keep receptacles tightly sealed.
Keep away from heat and direct sunlight.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 3)

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Use explosion-proof apparatus / fittings and spark-proof tools.

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

· **Storage**

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

Store in a cool location.

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurized containers.

· **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.

Do not gas tight seal receptacle.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

75-28-5 isobutane (10-25%)

TLV	Short-term value: 2370 mg/m ³ , 1000 ppm
-----	---

74-98-6 propane liquefied (10-25%)

PEL	Long-term value: 1800 mg/m ³ , 1000 ppm
-----	--

REL	Long-term value: 1800 mg/m ³ , 1000 ppm
-----	--

TLV	refer to Appendix F
-----	---------------------

· **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

Wash hands before breaks and at the end of work.

(Contd. on page 5)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 4)

· Breathing equipment:


Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

Protective gloves

I.E., Nitrile, Viton, Neoprene

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.

· Eye protection: Tightly sealed goggles.

· Body protection: Protective work clothing.

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:
Form: Aerosol

Color: Light yellow

· Odor: Characteristic

· Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition
Melting point/Melting range: undetermined

Boiling point/Boiling range: Not applicable, as aerosol

· Flash point: Not applicable, as aerosol

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature: 265 °C (509 °F)

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:
Lower: 0.6 Vol %

Upper: 10.9 Vol %

· Vapor pressure at 20 °C (68 °F): 8300 hPa (6226 mm Hg)

· Density: Not determined

· Relative density Not determined.

· Vapour density Not determined.

· Evaporation rate Not applicable.

· Solubility in / Miscibility with
Water: Not miscible or difficult to mix

(Contd. on page 6)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 5)

- | | |
|---|--|
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| dynamic: | Not determined. |
| kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 60-75 % |
| · Solids content: | 6-8 % |
| · Other information | The above data are typical values and do not constitute a specification. |

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **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:**

64742-88-7 Solvent naphtha (petroleum), medium aliph.

Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Repeated or prolonged skin contact with this product may produce skin irritation.
- **on the eye:** May be irritating.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **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:** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 6)

- **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 (German Regulation) (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, ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **DOT** Aerosols
- **ADR** 1950 Aerosols
- **IMDG, IATA** AEROSOLS

- **Transport hazard class(es)**

- **DOT**



- **Class** 2 Gases
- **Label** 2.1

- **ADR**



- **Class** 2 5F Gases

(Contd. on page 8)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 7)

· Label 2.1

· IMDG, IATA



· Class 2 Gases
 · Label 2.1

· Packing group Void
 · ADR Void

· Environmental hazards:
 · Marine pollutant: No

· Special precautions for user Warning: Gases
 · EMS Number: F-D,S-U

· Transport in bulk according to Annex II of
 MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR
 · Excepted quantities (EQ) Code: E0
 Not permitted as Excepted Quantity

· IMDG
 · Limited quantities (LQ) 1L
 · Excepted quantities (EQ) Code: E0
 Not permitted as Excepted Quantity

· UN "Model Regulation": UN1950, Aerosols, 2.1

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.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act) (-)

All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

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

None of the ingredients is listed.

(Contd. on page 9)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 8)

· **Canadian Domestic Substances List (DSL) (-)**

All components are listed on the DSL or NDSL

· **Philippines Inventory of Chemicals and Chemical Substances (-)**

All ingredients are listed.

· **Chinese Chemical Inventory of Existing Chemical Substances (-)**

All ingredients are listed.

· **Australian Inventory of Chemical Substances (-)**

All ingredients are listed.

· **New Zealand Inventory of Chemicals (-)**

All ingredients are listed.

· **Existing Chemical Substances (-)**

Solvent naphtha (petroleum), medium aliph.

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

· **Hazard pictograms**



GHS02 GHS04 GHS07 GHS08

· **Signal word** Danger

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

Solvent naphtha (petroleum), medium aliph.

· **Hazard statements**

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes skin irritation.

Causes serious eye irritation.

Causes damage to the central nervous system through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· **Precautionary statements**

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

If swallowed: Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
NK	69.5

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

USA

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/12/2015

Reviewed on 06/12/2015

Trade name: BullFrog 92381 Electronic Cleaner

(Contd. of page 9)

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 warranty any translation of this SDS not created by Cortec Corporation.

· **Date of preparation / last revision** 06/12/2015 / -

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

· *** Data compared to the previous version altered.**

USA