

Material Safety Data Sheet

Version 1
Revision Date 05/01/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : **EFFLORESCENCE**

Product Number :
Brand : FRONT 9
RESTORATION

Company : FRONT 9
74075 El Paseo
Suite A-15
Palm Desert, CA 92260

Telephone : + 1 (855) 803-1133
Fax :
Emergency Phone # : (PERS)
+1 (800) 633-8253



2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Corrosive

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage. H371 May cause damage to organs.

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse.

P405
P501

Store locked up.
Dispose of contents/container to an approved waste disposal plant.

HMIS Classification

Health hazard: 3
Flammability: 0
Physical hazards: 0

NFPA Rating

Health hazard: 3
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin May be harmful if absorbed through skin. Causes skin burns.
Eyes Causes eye burns.
Ingestion May be harmful if swallowed. Causes burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : HCl

| CAS-No. | EC-No. | Index-No. | Concentration |
|--------------------------|-----------|--------------|---------------|
| Hydrochloric acid | | | |
| 7647-01-0 | 231-595-7 | 017-002-01-X | Proprietary |
| Water | | | |
| 7732-18-5 | 231-791-2 | - | 63 % |

The specific chemical identity of this composition is being withheld as a trade secret.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

The product itself does not burn.

ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling Avoid inhalation of vapor or mist.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS No. | Value | Control parameters | Update | Basis |
|-------------------|---|-------|------------------------------|------------|--|
| Hydrochloric acid | 7647-01-0 | C | 2 ppm | 2007-01-01 | USA. ACGIH Threshold Limit Values (TLV) |
| Remarks | Upper Respiratory Tract irritation Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories. | | | | |
| | | C | 5 ppm 7 mg/m ³ | 2006-02-28 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | The value in mg/m ³ is approximate. Ceiling limit is to be determined from breathing-zone air samples. | | | | |
| | | C | 5 ppm 7 mg/m ³ | 1989-01-19 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (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).

Hand protection

Handle with gloves.

Eye protection

Tightly fitting safety goggles. Face shield (8-inch minimum).

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

| | |
|-----------------------|--|
| Form | liquid |
| Color | dark yellow |
| Odor | pungent |
| pH | no data available |
| Melting point | -30 °C (-22 °F) |
| Boiling point | 110 °C (230 °F) |
| Flash point | not applicable |
| Ignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Vapor pressure | 227 hPa (170 mmHg) at 21.1 °C (70.0 °F) 547 hPa (410 mmHg) at 37.7 °C (99.9 °F) |
| Density | 1.2 g/cm ³ at 25 °C (77 °F) |
| Water solubility | soluble |
| Viscosity, dynamic | 2.3 mPa.s at 15 °C (59 °F) |

10. STABILITY AND REACTIVITY**Chemical stability**

Stable under recommended storage conditions.

Conditions to avoid

No data available

Materials to avoid

Bases, Amines, Alkali metals, Metals, permanganates, e.g. potassium permanganate, Fluorine, metal acetylides, hexalithium disilicide

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Efflorescence

Acute toxicity

LD50 Oral - rabbit - 900 mg/kg (Hydrochloric acid)

LC50 Inhalation - rat - 1 h - 3124 ppm(Hydrochloric acid)

Skin corrosion/irritation no data available (Hydrochloric acid)**Serious eye damage/eye irritation** no data available (Hydrochloric acid)**Respiratory or skin sensitization** no data available (Hydrochloric acid)**Germ cell mutagenicity**

(Hydrochloric acid)

no data available (Hydrochloric acid)

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. (Hydrochloric acid)

(Hydrochloric acid)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

(Hydrochloric acid)

no data available (Hydrochloric acid)

Specific target organ toxicity - single exposure (GHS) May cause damage to organs. (Hydrochloric acid)**Specific target organ toxicity - repeated exposure (GHS)** no data available**Aspiration hazard**

no data available (Hydrochloric acid)

Potential health effects

| | |
|-------------------|---|
| Inhalation | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| Ingestion | May be harmful if swallowed. Causes burns. |
| Skin | May be harmful if absorbed through skin. Causes skin burns. |
| Eyes | Causes eye burns. |

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Hydrochloric acid)

Additional Information

RTECS: MW4025000

12. ECOLOGICAL INFORMATION**Toxicity**

Efflorescence

Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available (Hydrochloric acid)

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 1760 Class: 8 Packing group: III
Proper shipping name: Corrosive Liquid, n.o.s. (Hydrochloric acid)
Reportable Quantity (RQ): 13514 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG

UN-Number: 1760 Class: 8 Packing group: III EMS-No: F-A, S-B
Proper shipping name: Corrosive Liquid, n.o.s. (Hydrochloric acid)
Marine pollutant: No

IATA

UN-Number: 1760 Class: 8 Packing group: III
Proper shipping name: Corrosive Liquid, n.o.s. (Hydrochloric acid)

This product is acceptable for ORM-D shipping when in compliant packaging.

15. REGULATORY INFORMATION

OSHA Hazards

Corrosive

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

Hydrochloric acid

CAS-No.
7647-01-0

Revision Date
1993-04-24

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

Hydrochloric acid

CAS-No.
7647-01-0

Revision Date
1993-04-24

Pennsylvania Right To Know Components

Water

CAS-No.
7732-18-5

Revision Date

Hydrochloric acid

7647-01-0

1993-04-24

New Jersey Right To Know Components

Water

CAS-No.
7732-18-5

Revision Date

Hydrochloric acid

7647-01-0

1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sunland Chemical and Research Corporation shall not be held liable for any damage resulting from handling or from contact with the above product.
