

## SAFETY DATA SHEET

ENERJEX 360 HF

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Compilation date: 26/09/2012

Revision No: 1

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** ENERJEX 360 HF

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** PC14: Metal surface treatment products, including galvanic and electroplating products.

#### 1.3. Details of the supplier of the safety data sheet

**Company name:** Stainless Restoration Ltd  
Unit M1, Adamson Industrial Estate  
Croft Street  
Hyde  
Cheshire  
SK14 1EE  
UK  
**Tel:** +44 (0)161 368 6191  
**Fax:** +44 (0)161 366 9790  
**Email:** [fmorris@stainrest.com](mailto:fmorris@stainrest.com)

#### 1.4. Emergency telephone number

**Emergency tel:** +44 (0)7808 728 099

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CHIP:** T+: R26/27/28; C: R35

**Classification under CLP:** Acute Tox. 1: H300+310+330; Skin Corr. 1A: H314

**Most important adverse effects:** Very toxic by inhalation, in contact with skin and if swallowed. Causes severe burns.

#### 2.2. Label elements

**Label elements under CLP:**

**Hazard statements:** H300+310+330: Fatal if swallowed, in contact with skin or if inhaled.

H314: Causes severe skin burns and eye damage.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion

GHS06: Skull and crossbones



[cont...]

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**Precautionary statements:** P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P321: Specific treatment (see instructions on this label).  
P320: Specific treatment is urgent (see instructions on this label).  
P284: Wear respiratory protection.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor.

## Label elements under CHIP:

**Hazard symbols:** Very toxic.  
Corrosive.



**Risk phrases:** R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.  
R35: Causes severe burns.

**Safety phrases:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28: After contact with skin, wash immediately with plenty of.  
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.  
S38: In case of insufficient ventilation, wear suitable respiratory equipment.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

## 2.3. Other hazards

**PBT:** This substance is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

HYDROFLUORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-634-8	7664-39-3	T+: R26/27/28; C: R35	Acute Tox. 2: H330; Acute Tox. 1: H310; Acute Tox. 2: H300; Skin Corr. 1A: H314	10-60%

[cont...]

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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Apply HEXAFLUORINE® to the affected area. Always use the total content of the dispenser being used. Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Rinse the eyes with HEXAFLUORINE®. Always use the total content of the dispenser being used. Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Rinse the mouth with HEXAFLUORINE® spit out any residue. Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

**Inhalation:** Rinse the mouth with HEXAFLUORINE® spit out any residue. Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.

**Eye contact:** There may be severe pain. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of consciousness.

**Delayed / immediate effects:** Delayed effects can be expected after short-term exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** HEXAFLUORINE® Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

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## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Toxic. In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Notify the police and fire brigade immediately. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is exhaust ventilation of the area. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

**Suitable packaging:** Must only be kept in original packaging.

[cont...]

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## 7.3. Specific end use(s)

Specific end use(s): No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Hazardous ingredients:

HYDROFLUORIC ACID...100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1.5 mg/m3	2.5 mg/m3	-	-

### 8.2. Exposure controls

**Engineering measures:** Ensure there is exhaust ventilation of the area.

**Respiratory protection:** Respiratory protective device with particle filter. Gas/vapour filter, type A: organic vapours (EN141).

**Hand protection:** PVC gloves.

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Acid-resistant protective clothing.

**Environmental:** The floor of the storage room must be impermeable to prevent the escape of liquids.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless

**Odour:** Acrid

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Soluble

**Boiling point/range°C:** 88

**Melting point/range°C:** -40

**Relative density:** 1.1

**pH:** <2

### 9.2. Other information

Other information: Not applicable.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

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## 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

## 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Hot surfaces. Flames.

## 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong bases.

## 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (very toxic)	INH DRM ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.

**Eye contact:** There may be severe pain. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of consciousness.

**Delayed / immediate effects:** Delayed effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** Not applicable.

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## 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

## 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil. Soluble in water.

## 12.5. Results of PBT and vPvB assessment

**PBT identification:** This substance is not identified as a PBT substance.

## 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN1790

### 14.2. UN proper shipping name

**Shipping name:** HYDROFLUORIC ACID

### 14.3. Transport hazard class(es)

**Transport class:** 8 (6.1)

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** No

**Marine pollutant:** No

### 14.6. Special precautions for user

**Special precautions:** No special precautions.

**Tunnel code:** E

[cont...]

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Transport category: 2

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Specific regulations:** This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H300: Fatal if swallowed.

H300+310+330: Fatal if swallowed, in contact with skin or if inhaled.

H310: Fatal in contact with skin.

H314: Causes severe skin burns and eye damage.

H330: Fatal if inhaled.

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

R35: Causes severe burns.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



# HEXAFLUDRINE@J



# liJ



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