	Material Safety Data Sheet HEXAFLUORINE®	Approved by:	BULLETIN Page number: 1/3
Implemented on: 07.12.95	Reference:	Modified on:	Update:
	FDSHexa	26.06.09	6

In accordance with 1907/2006/CE\* European directive In accordance with 1272/2008\* European directive

1. PRODUCT IDENTIFICATION

1.1. Trade name:

**HEXAFLUORINE®** 

1.2. Other names

Chemical name / class:

Aqueous solution containing amphoteric and chelating salts

Synonyms:

None

1.2. Utilization:

Washing of ocular or cutaneous chemical splashes of hydrofluoric acid

(HF) and fluorides in acidic medium

1.3. Supplier and manufacturer:\*

**PREVOR** 

Moulin de Verville

BP1

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fds@prevor.com

1.4. Emergency telephone number:\*

+33(0)1 30347676 (heures ouvrables – GMT +1)

ORFILA?

#### 2. HAZARDS IDENTIFICATION\*

2.1. Hazardous components:

Non hazardous mixture according to 1272/2008/EC regulation.

2.2. Specific hazards: No specific hazard.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Composition:

Chemical Name	CAS number	% w/w
Hexafluorine®	proprietary	proprietary
Water		balance

3.2. Impurities: No hazardous impurities.

#### 4. FIRST-AID MESURES\*

This is a first-aid product designed to be used in cases of HF contamination. Exposure to this product will not cause additional injury. Victims of chemical exposure must seek advice from a specialist or receive medical attention. Take a copy of the label and MSDS of the product which caused the injury to physician or health professional with victim.

4.1. Inhalation:

No specific hazards

4.2. Eye exposure:

No specific hazards

4.3. Skin exposure:

No specific hazards

4.4. Ingestion:

No specific hazards

4.5. Note to physicians:

This product is a class IIa medical device in Europe, and has been specifically designed to reduce or avoid injuries caused by an ocular or cutaneous splash of HF or its derivatives. This solution is not hazardous in itself. For victims of HF-type splash washed with Hexafluorine<sup>®</sup>, check that they have thoroughly been washed and apply current protocol of the physician in charge. If necessary, apply an HF antidote such as calcium gluconate.

# 5. FIRE-FIGHTING MEASURES\*

This product is non-flammable and non-combustible.

5.1. Suitable extinguishing media:

Water spray, carbon dioxide, dry chemical, foam, any "ABC" class device

5.2. Unsuitable extinguishing media:

None

5.3. Thermal decomposition into toxic

Carbon monoxide, carbon dioxide, nitrogen or carbon oxides, organic

substances:

vapours.

5.4. Specific protective equipment for

In case of fire, wear Self-Contained Breathing Apparatus.

fire-fighters:

# 6. ACCIDENTAL RELEASE MEASURES\*

6.1. Personal precautions:

No specific measures with Hexafluorine® in itself.

6.2. Environmental precautions:

No specific precautions. Clean up the spilled non-hazardous liquid.

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6.3 Clean-up methods:

No specific precautions. This product can be absorbed, for example, with

Trivorex®.

7. HANDLING and STORAGE

7.1. Handling:

No specific precautions.

7.2. Storage:

Technical measures / Conditions for safe

storage:

Sterile product. Keep in the original container. This product has two year shelf life if kept sealed in its original packaging. When possible, store

containers in a cool, dry location, away from sources of intense heat, or where

freezing is possible.

Storage incompatibility:

Product is stable in normal conditions of handling, use and storage.

8. EXPOSURE CONTROL / PERSONAL PROTECTION\*

8.1. Exposure Limit Value:

None (not available).

8.2. Engineering controls:

No specific precautions in cases of simple Hexafluorine® exposure. Use

adequate ventilation to prevent exposure to HF or its derivatives which contaminates the victim.

8.3. Personal protection equipment:

Respiratory protection:

Hand protection:

None None None

Eye protection: Skin/body protection:

None

Specific hygiene measures:

None

Protection of the responders:

None for Hexafluorine<sup>®</sup>. If treating a victim of a splash of HF or one of its derivatives, responders should wear adequate protection equipment in order to protect themselves from any contact with the chemical remaining on the

victim.

9. PHYSICAL AND CHEMICAL PROPERTIES\*

Appearance(20°C):

Clear and colourless liquid

Odour:

none

Odour threshold:

Not applicable

Melting point/ freezing point:

-1°C

Boiling point:

100°C

Flash point:

Non flammable

Evaporation rate (water = 1):

1

Auto-ignition temperature:

Non flammable

Upper/lower flammability limits:

Non applicable 1.047 g/cm<sup>3</sup>

Specific gravity: pH:

From 7.2 to 7.7

Vapour pressure:

18 mmHg (20 °C)

Solubility in water:

soluble

Solubility:

insoluble in organic solvents

Partition coefficient n-octanol/water:

100% soluble in water

10. STABILITE ET REACTIVITE\*

10.1. Chemical stability:

Non reactive and stable mixture.

10.2. Hazardous reactions:

None (no hazardous polymerization, no decomposition, no condensation

and no self-reactivity expected).

10.2. Conditions to avoid:

Store in temperatures above 2°C. Do not expose DAP (autonomous

portable shower) to temperatures above 50°C.

10.3. Materials to avoid:

None

10.4. Hazardous decomposition products:

Thermal decomposition from 100 °C: carbon monoxide and dioxide,

nitrogen or carbon oxides, organic vapours.

11. TOXICOLO§GICAL INFORMATION

11.1. Ingestion:

 $DL_{50}$  (rat) > 2000 mg/Kg

11.2. Local effects:

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Skin contact:

Non irritant (tested on rabbits)

Eye contact:

Non irritant (tested on rabbits)

Sensitization to the product:

Non sensitising (Magnusson & Kligman Method on Guinea Pig)

11.3. Mutagenicity:

Non mutagenic (Ames test negative, for a similar molecule).

#### 12. ENVIRONMENTAL INFORMATIONS

Hexafluorine<sup>®</sup> is not harmful if released into the environment. Relative stability (at standard temperature and pressure): stable

Mobility: the product is liquid and soluble in water.

12.1. Ecotoxicity:

No environmental hazard identified.

12.4 Biodegradability:

Hexafluorine\* is stable, but will decompose into simple salts in the

environment.

12.3 Bioaccumulative potential:

Hexafluorine<sup>®</sup> does not bio-accumulate (log Ko/w: 100 % soluble in water).

### 13. DISPOSAL PRECAUTIONS

Product disposal:

No specific disposal measures. Recycle containers.

### 14. TRANSPORT INFORMATION

No transport regulation applies to the Hexafluorine® solution.

RID/ADR:

Non regulated

IMDG:

No specific regulation for Hexafluorine® in itself.

IATA:

No specific regulation for Hexafluorine<sup>®</sup> in itself.

	DAP	
UN or ID N°	UN 1013	
Class	2,2	
Shipping name	Carbon dioxide	
Packing instruction	200	

Other regulatory provisions:

RTDM R/F:

Non regulated

Marine Pollutant:

No

#### 15. REGULATORY INFORMATION\*

Defined as a medical device by the 93/42/EC regulation. Product classified as non hazardous according to the – CLP (1272/2008/EC) – regulation, (Classification, Labelling and Packaging of chemicals) incorporating GHS (Globally Harmonized System) in Europe.

MSDS elaborated in accordance with REACH regulation 1907/2006/CE.

#### 16. OTHER INFORMATION

Recommended utilizations:

Use Hexafluorine<sup>®</sup> immediately and optimally as primary action to wash eye and/or skin in cases of splashes of hydrofluoric acid or

fluorides in acidic medium.

In cases of splashes due to other chemicals (acids, bases, oxidizers, reducing agents or solvents), Diphoterine® washing is more adapted.

This sheet complements the technical sheets but does not replace them. The information that is contained herein is based on the state of our knowledge related to the product concerned at the date of issue and is given in good faith. Moreover, the user's attention is drawn to the possible risks incurred by using the product for any other use than that for which it was intended.

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