



## **SECTION 1: Identification of the substance or mixture and of the company**

### **1.1. Product identifier**

Product Description: Labial archwire tube.

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

Identified Use Professional use: Protective device for labial archwires or orthodontic wires.

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

Leone s.p.a.

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e-mail: [research@leone.it](mailto:research@leone.it) – <http://www.leone.it>

Tel. +39 055.30.44.1 – Fax +39 055 374808.

### **1.4. Emergency telephone number**

+39 055.30.44.1. An answering machine is on during closing time.

## **SECTION 2: Hazards identification**

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

According to Regulation (EC) no. 1272/2008 [CLP].

This product does not meet the criteria for classification as hazardous in accordance with Titles I and II of Regulation (EC) no. 1272/2008 on classification, labelling and packaging of substances and mixtures.

In case the products undergo to any process that causes the change in the state of the raw material, the information in this safety data sheet are to be referred to the raw material. Thus, the following health hazards shall be applied to the personnel involved in the raw material's processing and not to the final user.

### **2.2. Label elements**

Not applicable.

### **2.3. Other hazards**

Not classified as PBT or vPvB.

## **SECTION 3: Composition/information on ingredients**

### **3.1. Substances**

This product is a mixture.

### **3.2. Mixtures**

Hazardous components: none.

Tetrafluoroethylene homopolymer (EC No.: 500-721-5, CAS No.: 162491-88-5).

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

Inhalation If exposed to fumes from overheating or combustion, move to fresh air. Seek medical advice if symptoms persist.

Skin contact If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Seek medical advice.

Eye contact Flush eyes with plenty of water. Seek medical advice if symptoms persist.

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

Overheating fume may cause polymer fume fever. Symptoms are flu, with chills and fever, which may not occur until several hours after exposure and pass off within 36-48 hours, even in absence of treatment.

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

Non applicable.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing Media Water, carbon dioxide, foam and dry chemical.

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

Hazardous combustion products: hydrogen fluoride (HF), carbonyl fluoride, carbon monoxide and low molecular weight fluorocarbons.

### **5.3. Advice for firefighters**

the product does not burn without an external flame. Wear self-contained breathing apparatus and clothing to protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear neoprene gloves when handling refuse from a fire.

## **SECTION 6: Accidental release measures**

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

See Section 8.

### **6.2. Environmental precautions**

Not applicable.



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

Pick up by mechanical means.

### 6.4. Reference to other sections

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Use the Good Manufacturing Practices (GMP) during tube handling and processing.

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

Avoid atmospheres to 95% oxygen.

### 7.3 Specific end use(s)

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

USA. Hydrogen fluoride, occupational exposure limit (TWA): 3ppm [Occupational Safety and Health Administration (OSHA) Regulation 29 CFR 1910.1000, Table Z-2].

### 8.2. Exposure controls

#### Appropriate engineering controls

Use local exhaust to completely remove vapours and fumes generated during hot processing at the work area.

#### Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection	Protective glasses are recommended.
Skin/ Hand protection	Gloves and long sleeve shirt are recommended when handling hot polymer.
Respiratory protection	Use respirator when temperature exceeds 280°C if ventilation is inadequate to maintain hydrogen fluoride (HF) concentration below the permissible exposure limit.
Other	Avoid contamination of cigarettes or tobacco with polymer dust.

## SECTION 9: Physical and chemical properties

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

Appearance	Solid.
Odour	Odourless.
Melting point	342°C.
Flash point	Not applicable.
Solubility (water)	Insoluble.
% volatile by volume	Not applicable.
Specific gravity	21-23.

### 9.2. Other information

No further details as regards the safety-relevant parameters are required.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not reactive upon a correct use.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

None expected.

### 10.4. Conditions to avoid

If there is a source of ignition the product burns in an atmosphere composed of 95% oxygen.

### 10.5. Incompatible materials

Materials to avoid: melted alkali metals, interhalogens.

### 10.6. Hazardous decomposition product(s)

A temperature exceeding 280°C the fine dust may liberate toxic gases such as hydrogen fluoride (HF) and fluoride olefins. Dusts formed during overheating may cause polymer fume fever.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	Inhalation: Inhalation of fumes may result in polymer fume fever polymer fume fever. Symptoms are flu, with chills and fever, which may not occur until several hours after exposure and pass off within 36-48 hours, even in absence of treatment.
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Potential Chronic Health Effects           None.  
Medical conditions aggravated by exposure   None.

## **SECTION 12: Ecological information**

Ecological problems are not expected from a correct use.

### **12.1. Toxicity**

Not applicable.

### **12.2. Persistence and degradability**

Not applicable.

### **12.3. Bioaccumulative potential**

Not applicable.

### **12.4. Mobility in soil**

Not applicable.

### **12.5. Results of PBT and vPvB assessment**

Not applicable.

### **12.6. Other adverse effects**

Not applicable.

## **SECTION 13: Disposal considerations**

Dispose of in accordance with local and national regulations. In Italy dispose of according to Legislative Decree of April 3 2006 no. 152 "Regulations on environmental subject", application of European Directives on environmental protection, and subsequent modifications and integrations. According to Directive 2008/98/EC waste does not requires particular monitoring.

### **13.1. Waste treatment methods**

By incineration, acid gaseous product must be removed by alkaline scrubbing.

## **SECTION 14: Transport information**

Not dangerous according to current transportation regulations.

### **14.1. UN-number**

Not applicable.

### **14.2. UN proper shipping name**

Not applicable.

### **14.3. Transport hazard class(es)**

Not applicable.

### **14.4. Packing group**

Not applicable.

### **14.5. Environmental hazards**

Not applicable.

### **14.6. Special precautions for user**

Not applicable.

### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## **SECTION 15: Regulatory information**

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

Regulation (EC) no. 1272/2008 (Classification, labeling and packaging of substances and mixtures) and subsequent amendments, amending and repealing Directive 67/548/EEC and 1999/45/EC, and amending Regulation (EC) no. 1907/2006.

Directive 2009/161/EU (third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC).

This product is CE marked in accordance with the essential safety and performance requirements of Annex I of the European regulation on medical devices.

### **15.2. Chemical safety assessment**

Not applicable.

## **SECTION 16: Other information**

This Safety data sheet was prepared in accordance with the Commission Regulation (EU) no. 453/2010 and Commission Regulation (EU) no. 2015/830.



The safety data sheet has been written according to relevant European provisions, on the basis of information received by the supplier of the mixture.

The product is intended for orthodontic and odontological use only. The use of the product has to be restricted to skilled and licensed professionals. The information relates only to specific product designated and is not intended as a warranty of quality.

Leone disclaims any responsibility arising out of the use of the information here furnished, or of the handling, the application or the manufacture of the product here described. The final user is called to verify the application and completeness of the information herein in relationship to the specific use and reliability of the rules and local applicable dispositions.

The present information does not imply any liberty to break patent rights.

Previous safety data sheet no. K04/4E dated 16/01/2017 is to be considered obsolete. In comparison to the preceding revision, meaningful changes have not been effected but only adjustments to the European provisions which regulate the compilation of safety data sheets.

This safety data sheet is subject to revision. Visit our web site [www.leone.it](http://www.leone.it) for an updated version of the present sheet.

#### **Legend**

CAS No.: Chemical Abstract Service Registry number.

EC No.: European Inventory of Existing Commercial Chemical Substances.

IBC Code: International Bulk Chemicals Code.

PBT: Persistent, Bioaccumulative And Toxic Substances.

TWA: Time Weighted Average.

vPvB: Very Persistent And Very Bioaccumulative Substances.