



Safety Data Sheet

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Product Description

O-Ties Elastic

REF NUMBER

Check IOS Catalog

Restrictions to use:

For use only by dental professionals.

Manufacturer : International Orthodontic Services
Address : 12811 Capricorn St. Stafford, TX 77477 USA
Phone No, : 1888-IOS-8882 (1888-461-8882)
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HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

Not a dangerous substance according to GHG.

GHS-Labeling:

Not a dangerous substance according to GHS.

COMPOSITION/INFORMATION ON INGREDIENTS

Type of product: Mixture
Thermoplastic polyurethane

FIRST AID MEASURES

Description of first aid measures

In case of skin contact: CONTACT WITH THE HOT MELT. Cool immediately with plenty of water. Do not remove product crusts which may have formed neither forcibly nor by applying any solvents to the skin involved. To obtain treatment for possible burns, and appropriate skin care, seek medical advice immediately.

The following information refers to the handling of the product at room temperature. In case of skin contact wash affected areas thoroughly with soap and plenty of water.

FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water. Foam, Dry Chemical

Special hazards arising from the substance or *mixture*:

Burning releases carbon monoxide, Carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

Advice for fire-fighters:

Firemen must wear self-contained breathing apparatus.

DO not allow contaminated extinguishing water to enter the soil, ground-water or surface waters

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Put on protective equipment (see section 8). Granules – slip hazard! Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away,

Environment related measures: Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up: Use mechanical handling equipment. Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

Reference to other sections: for further disposal measures see section 13.

HANDLING AND STORAGE

Precautions for safe handling:

Adequate ventilation and if necessary, effective exhaust must be provided at the workplace when opening fresh drums, drying granules and processing the material. Under recommended processing conditions small amounts of emissions may occur.

Provided good ventilation and/or local exhaust systems are used, the Workplace Exposure Limit(s) stated in section 8 should not be exceeded. Dust must be removed by effective exhaust ventilation.

Keep away from foodstuffs, drinks and tobacco. Wash hands and face before breaks and at the end

of work. Keep working clothes separately. Change Contaminated clothing.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and dry.

Storage temperature. < 40 °C

EXPOSURE CONTROLS/PERSONAL PROTECTION

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures. In our experience the provision of effective fresh-air and exhaust ventilation equipment at the points where vapors may be generated will ensure compliance with the tolerance limits quoted below.

Control parameters

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value	Remarks
tetrahydrofuran	109-99-9		TWA	200ppm 590 mg/m ³		
tetrahydrofuran	109-99-9	SG OEL	STEL	250 ppm 737 mg/m ³		
General limiting value of dust		SG OEL	TWA	10 mg/m ³		Total dust

Exposure controls

Respiratory protection:

In case of dust formation use respiratory equipment with filter type particle Utter PI according to EN 143.

Hand protection:

Suitable materials for safety gloves, EN 374. Polyvinyl Chloride - PVC (≥ 0.5 mm)
Contaminated and/or damaged gloves must be changed.

Eye protection:

Wear eye/face protection.

Skin and body protection:

Wear suitable protective clothing

Further protective measures:

Do not breathe dust/vapor. Grease skin.

PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: granular
Color: different according to coloration
Odour: almost odourless

pH:	not applicable
Softening point:	> 120 °C
Upper/lower flammability or explosive limit:	not applicable
Vapour pressure:	not applicable
Density:	ca. 1,2g/cm ³
Bulk density:	500-700 kg/m ³
Water solubility:	practically insoluble
Autoignition temperature:	>210°C
Ignition temperature:	not applicable

STABILITY AND REACTIVITY

Chemical stability: Decomposition begins at 230 °C.

Possibility of hazardous reactions: No hazardous reactions observed.

Hazardous decomposition products: Smouldering or incomplete combustion leads to the formation of toxic gas mixtures consisting mainly of CO, CO₂ and nitrogen oxides.

TOXICOLOGICAL INFORMATION

For risk assessment data of a similar product.

Acute toxicity LDSO Oral, rat: > 5000 mg/kg

Acute toxicity LDSO subcutaneous, rat:>5000 mg/kg

Primary skin irritation, rabbit: non-irritant
Primary mucosae irritation, rabbit: non-irritant

Skin sensitization according to Magnusson/Kligmann (maximizing test). No sensitisation established on guinea-pigs

Under recommended processing conditions small amounts of isocyanates may be emitted. Exceeding the recommended processing temperatures leads to a significant increase in the amount of isocyanate vapor generated.

Over-Exposure entails a risk of concentration-dependent inhalatory irritation and/or sensitization by isocyanates (delayed appearance of difficult breathing, coughing, asthma is possible).

According to our experience and information the product has no harmful effects on health if properly handled.

ECOLOGICAL INFORMATION

Ecotoxicological studies of the product are not available

Do not allow to escape into waterways, wastewater or soil.
For risk assessment data of similar product:

Additional information on ecotoxicology:

The product does not add to the AOX—value of effluent water (DIN 38405).

On the basis of the ecotoxicological data, the product can be classified as non-hazardous to fish and daphnia.

DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

Waste treatment methods

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip—dry"), they can be sent to as appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and reprocessed into new moulded articles. Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type.

TRANSPORT INFORMATION

ADR/RID	Not dangerous goods
ADN	Not dangerous goods

This Classification data does not apply to transportation by tanker. If required, additional information can be requested from the manufacturer.

IATA	Not dangerous goods
IMDG	Not dangerous goods
Special precautions for user:	Not dangerous cargo. Slight smelt Keep dry. Keep separated from foodstuffs.

OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.