I STAR Astar Orthodontics Inc.

Material Safety Data Sheet

Document number: Updated number: Date of updated: Date of approval: AR/TH-MS-002b A/0

2010, Jan, 1st

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A	Approved by:

A/1

Jenny He

1. Product and Company Identification		
Company Name:	Product Grade/ Name:	
Astar Orthodontics Inc.	Polyisoprene(PI) rubber	
	(Natural latex rubber)	
Address:	Chemical Name:	
Suite1503, Lidu#1 Mansion, Lane#500, South Zhongshan	1,3 Butadiene, 2-Methyl, Homopolymer	
Rd. Section1		
City: Shanghai	Product Use :	
	Latex Intral oral and extra oral elastics	
Country: China	Indication of use:	
Telephone: +86-21-6303 1017	For Orthodontic treatment only. This product is used by patients who need t	
E-mail: service@astar-ortho.com.cn	follow doctor's instructions.	

2. Composition/Information on Ingredients

All components are non-hazardous				
Material	CAS Number	%(Range)	ACGIH-TLV*	OSHA-PEL*
Natural Rubber	NA	95~97	NA	NA
Sulfur	NA	0~1.0	NA	NA
Zinc oxide	NA	0~1.0	NA	NA
Polymeric hindered phenol	NA	1.0~2.0	NA	NA
Carbamate derivative	NA	0~1.0	NA	NA

*8-hour TWA.

3. Hazard Identification

Made by natural rubber which is widely used in dental field to be proved safe enough, does not contain hazardous or volatile substance.

No particular hazards known. However, overexposure to thermal decomposition may produce potentially hazardous dust or fume which can be inhaled, swallowed, or come in contact with skin, eyes, or mucous membranes.

Potential Environmental Effects : NA

4.First Aid Measures			
Routes of Exposure	First Aid Measures		
Eye contact	Flush well with running water to remove particulates		
	and get medical attention.		
Skin contact	Rubber allergic reactions may occur in some		
	people.Consult a physician if symptoms persist.		
Inhalation	If exposed to fumes overheating or combustion, move		
	to fresh air. if condition continues, consult physician.		
Ingestion	Seek medical help if large quantities of material have		



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been ingested.

5.Fire Fighting Measures			
Flashpoint & Method:	Flammable(Explosive)Limits in air	Auto ignition Temperature	
°C/°FN/A	LEL: N/E UEL: N/E	NA	
Flame Propagation or Burning	Properties contributing to fire	Flammability classification	
NA	intensity	Health-, Flammability-,Reactivity	
	NA		
Extinguishing Media	Extinguishing media to avoid		
Dry chemical, water, foam	NA		
Protection and procedures for firefig	Unusual fire and explosion		
overexposure to thermal decom	NA		
hazardous dust or fume. Wear self-c			

6.Accidental Release Measures

Containment Techniques:
N/A
Spill/Leak Clean-up procedures and equipment:
Sweep up with mechanical means. Dispose of in accordance with state, local or federal regulation.
Environment Precautions:
N/A
Special Instructions:
N/A

7.Handling and Storage

Handling

No special cares are requested. Keep away from flame or excessive heat.

Storage

Keep the package and containers closed, and stored at room temperature. Avoid the corrosive gases. Keep away from sunlight. Shelf life: 2 years.

8.Exposure Control/Personal Protection

EC regulation requires labeling of medical devices with natural rubber latex in them. The warning reads

"
Caution: This product contains natural rubber latex with may cause allergic reaction".

Workers exposed to latex gloves and other medical products containing natural rubber latex may develop

allergic reactions such as skin rashes, hives, eye or sinus symptoms, asthma and (rarely) shock.

Persons allergic to fruits or persons with spina bifida may be allergic to natural rubber.

9.Physical and Chemical Characteristics			
Appearance and Odor	Solid, Rubber Odor		
Physical State:	Solid		



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Solubility in Water(20 ° C):	Does not soluble
Solubility in Organic Solvent(20 ° C):	Does not soluble
Melting Point/Range:	NA
Boiling Point:	NA
Flash Point:	NA
Ignition Point:	NA
Vapor Pressure(20 $^{\circ}$ C):	NA
Density(20℃):	.95
PH Value (at 10g/1H 2O):	NA
Viscosity (20℃)	NA

10.Stability and Reactivity		
Incompatibility (Materials to Avoid)		
N/A		
Stability?	Conditions to Avoid	
Stable	High temperature. Flames cause oxide of carbon.	
Hazardous Decomposition Products:		
By fire, oxides of carbon when burned		
Hazardous Polymerization?		
🗆 May Occur 🔳 Will not Occur		

11.Toxicological Information

No toxic effect would be expected from exposure to the solid form of products.

Overexposure to fumes or dust generated during flume may or may cause adverse health effects.

This material contains rubber, which for some individuals, could result in development of rubber sensitization.

12.Ecological Information

Biodegradability: N/D

Biodaccummulation: N/D

Follow the local regulation for non-hazardous rubber materials.

13.Disposal Considerations

Regulations:

Disposal as per medical devices solid wastage in accordance with local regulations.

Properties(Physical/Chemical) Affecting Disposal

NA

Follow instructions under points6 and 12.

14.Transport Information

Technical Shipping Name: Not regulated

Freight Class Bulk: N/A

Freight Class Package: N/A



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Hazard Class or Division: Non-Hazardous

Further Details: Product is not considered dangerous for transport.

15.Regulatory Information					
Euro	European Community: assigned to ClassIIa by Medical Device Directive 93/42 EEC				
Labe	information	follow	the	EN980:	2008 《Symbols for use in the labelling of medical devices》

16.Other Information

This information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.

The information in this MSDS is based on technical data that we believe to be reliable. Astar assumes no responsibility and makes no warranties, expressed or implied, regarding the accuracy or currency of any data so provided. Since conditions of storage, use, and disposal of this products are beyond our control, we make no warranties, expressed or implied, and assume no liability in connection with the use of this product.

Attention for final products:

For Orthodontic treatment only.

This product is for intra-oral and extra- oral used, used by patients who need to follow doctor's instructions. The product contain natural rubber latex in them. The warning reads :

"
Caution: This product contains natural rubber latex with may cause allergic reaction".

N/A=not applicable NA= not available	N/D= not determined
mg/m ³ = milligrams per cubic meter	C = ceiling PEL = permissible exposure limit



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