

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

071717610

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

071717453 071717495 071717552 071717560 071717578 071717586 071717594 071717628 071717636 071717644

071717768 071717776 071717784 071717792 071717800 071717818 071717826 071717834 071717842 071717859

**Safety Data Sheet**

Date Issued: 1995  
Document Number: SDSDNFTO  
Date Revised: 3/23/2011  
Revision Number: 01

**1. PRODUCT IDENTIFICATION**

**Trade Name (as labeled):** DENSFIL TITANIUM OBTURATORS  
**Chemical Name/Classification:** TITANIUM- GUTTA PERCHA  
**Product Identifier (Part/Item Number):** 6 AL4V ELI. Titanium and Dry Natural Rubber  
**U.N. Number:** Not Applicable  
**U.N. Dangerous Goods Classification:** Not Applicable  
**Recommended Use:** Obturating Root Canals  
**Restrictions on Use:** None  
**Manufacturer/Supplier Name:** DENTSPLY Maillefer  
**Manufacturer/Supplier Address:** 608 Rolling Hills Drive Johnson City, Tn, 37604  
**Manufacturer/Supplier Telephone Number:** 1-800-924-7393  
**Emergency Contact Telephone Number:** 1-800-262-8200  
**Email address:** [chemtrec@chemtree.com](mailto:chemtrec@chemtree.com)

**2. HAZARD(s) IDENTIFICATION****Hazard/Danger Classification:**

Health	Environmental	Physical
Not Applicable	Not Applicable	Not Applicable

**Associated Hazards:**

Hazard Statements	Precautionary Statements
Not Applicable	Not Applicable

**EU Classification:** Not Applicable

**EU Risk (R) and Safety (S) Phrases:** Not Applicable

**Refer to Section 16 for the full text of the EU Classifications and R Phrases.**

# DENTSPLY Maillefer

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Non Hazardous Components	C.A.S. # EC#	IUPAC Name	Substance Classification	WT %
Titanium	7440-32-6	titanium		Balance
	C.A.S. # EC#	IUPAC Name	Substance Classification	WT%
Dry Natural Rubber	N/A	Gutta Percha	Natural	Balance

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

## 4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	Rinse opened eye for several minutes under running water
Skin	Generally the product does not irritate the skin.
Inhalation	Supply fresh air; consult a doctor in case of complaints.
Ingestion	If symptoms persist consult a doctor.
Other	Not Applicable
Note to Physicians (Treatment, Testing, and Monitoring)	
Not Applicable	

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam
Fire Fighting Procedures:	No special measures required
Specific Hazards Arising from the Chemical:	No special measures required
Precautions for Fire Fighters:	No special measures required

# DENTSPLY Maillefer

**Recommended Protective Equipment for Fire Fighters:** Wear positive pressure self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and during cleanup in enclosed or poorly ventilated areas immediately after a fire.

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, PPE and Emergency Procedures:** N/A

**Environmental Precautions:** N/A

**Methods and Materials for Containment and Clean-up:** Place in suitable containers for disposal by local, state, or federal waste disposal regulations.

**Recommended Personal Protective Equipment for Containment and Clean-up:**

EYES/FACE	SKIN	RESPIRATORY	
			

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** None

**Conditions for Safe Storage:** Not Applicable



## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** Not Applicable

**Biological Exposure Limits:** Not Applicable

**Appropriate Engineering Controls:** Not Applicable

# DENTSPLY Maillefer

<b>Individual Protection Measures (PPE)</b>			
Specific Eye/face Protection: Not Applicable			
Specific Skin Protection: Not Applicable			
Specific Respiratory Protection: Not Applicable			
Specific Thermal Hazards: Not Applicable			
<b>Recommended Personal Protective Equipment</b>			
EYES/FACE	SKIN	RESPIRATORY	THERMAL
			N/A
Environmental Exposure Controls: Not Applicable			
General Hygiene Considerations and Work Practices: Not Applicable			
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable			

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink coating over silver file	Explosive limits:	Not Available
Odor:	None reported	Vapor pressure:	Not Available
Odor threshold:	Not Applicable	Vapor density:	Not Available
pH:	7	Relative density:	4.5g/cc
Melting/freezing point:	1677°C	Solubility:	Negligible
Initial boiling point and range:	3277°C @ 760mm Hg	Partition coefficient: n-octanol/water:	Not Available
Flash point:	Not Available	Auto-ignition temperature:	Not Available
Evaporation rate:	Not Available	Decomposition temperature:	Not Available
Flammability:	Not Available	Viscosity:	Not Available
Explosive Properties:	Not Available	Oxidizing Properties:	Not Available

## 10. STABILITY AND REACTIVITY

# DENTSPLY Maillefer

<b>Reactivity:</b> None
<b>Chemical Stability:</b> Stable
<b>Possibility of Hazardous Reactions:</b> When used and handled according to specifications, this product does not have any harmful effects.
<b>Conditions to Avoid:</b> None
<b>Incompatible materials:</b> mineral acids, halogens, carbon dioxide, strong oxidizing agents.
<b>Hazardous Decomposition Products:</b> N/A

## 11. TOXICOLOGICAL INFORMATION

<b>Signs and Symptoms of Overexposure:</b> None							
<b>Emergency Overview:</b> Titanium is biocompatible. Gutta Percha is a nonhazardous natural rubber							
Likely Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)	LD50 Testing Data (as applicable)	LC50 Testing Data (as applicable)
<b>Eye:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Skin:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Inhalation:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Ingestion:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Other:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Medical Conditions Aggravated by Exposure:</b> None.							
<b>Carcinogenicity:</b> None.							

## 12. ECOLOGICAL INFORMATION

<b>Toxicity:</b> No hazards
<b>Persistence and Degradability:</b> Stable
<b>Bio-accumulative Potential:</b> None
<b>Mobility in Soil:</b> None
<b>Other Adverse Effects:</b> None
<b>Results of PBT/vPvB Assessment:</b> None

# DENTSPLY Maillefer

## 13. DISPOSAL CONSIDERATIONS

**Regulations:** Dispose of container and unused contents in accordance with federal, state and local requirements.

**Properties (Physical/Chemical) Affecting Disposal:** None

**Waste Treatment Recommendations:** None required.

## 14. TRANSPORT INFORMATION

**UN Identification Number:** Not Applicable

**UN Proper Shipping Name:** Not Applicable

**Transport hazard class(es):** Not regulated

**Packing Group:** III

**Special precautions for user:** None



Include as applicable

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):** Not regulated

**Toxic Substances Control Act (TSCA):** Not regulated

**Clean Water Act (CWA):** Not regulated

**Clean Air Act (CAA):** Not regulated

**Superfund Amendments and Reauthorization Act (SARA) Title III Information:** None

**SARA Section 311/312 (40 CFR 370) Hazard Categories:** None

<b>Immediate Hazard:</b>	None	<b>Pressure Hazard:</b>	None
<b>Delayed Hazard:</b>	None	<b>Reactivity Hazard:</b>	None

# DENTSPLY Maillefer

Fire Hazard:	None
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This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

## State Regulations

**California:** This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
None		

## International Regulations

Canadian Environmental Protection Act: None

Canadian Workplace Hazardous Materials Information System (WHMIS): None

European Inventory of Existing Chemicals (EINECS): None

16. OTHER INFORMATION	
Full text of Classification abbreviations used in Section 2 and 3: None	
Date of SDS Preparation/Revision: 3/11/11	
Data Sources: Supplier	



## Safety Data Sheet

Date Issued: 1995  
Document Number: SDSDNFTO  
Date Revised: 05/07/14  
Revision Number: 02

### 1. PRODUCT IDENTIFICATION

**Trade Name (as labeled):** DENSFIL TITANIUM OBTURATORS

**Chemical Name/Classification:** TITANIUM

**Product Identifier (Part/Item Number):** 6 AL4V ELI. Titanium

**U.N. Number:** Not Applicable

**U.N. Dangerous Goods Classification:** Not Applicable

**Recommended Use:** Obturating Root Canals

**Restrictions on Use:** None

**Manufacturer/Supplier Name:** DENTSPLY Maillefer

**Manufacturer/Supplier Address:** 608 Rolling Hills Drive, Johnson City, Tn. 37604

**Manufacturer/Supplier Telephone Number:** 1-800-924-7393 (Product Information)

**Emergency Contact Telephone Number:** Chemtrec (800) -262-8200

**Email address:** [Chemtrec@chemtrec.com](mailto:Chemtrec@chemtrec.com)

### 2. HAZARD(S) IDENTIFICATION

**Hazard/Danger Classification:**

Health	Environmental	Physical
Not Applicable	Not Applicable	Not Applicable

**Associated Hazards:**

Hazard Statements	Precautionary Statements
Not Applicable	Not Applicable

**EU Classification:** Not Applicable

**EU Risk (R) and Safety (S) Phrases:** Not Applicable

**Refer to Section 16 for the full text of the EU Classifications and R Phrases.**

# DENTSPLY Maillefer

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # EC#	IUPAC Name	Substance Classification	WT %
None				

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.





## 4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.
Skin	Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before use.
Inhalation	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult. Give oxygen. Get medical aid.
Ingestion	Do not induce vomiting. Immediately give two glasses of water, a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering lungs.
Most important symptoms of exposure	Choking
Other	Not Applicable
Note to Physicians (Treatment, Testing, and Monitoring) Not Applicable	

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Water, ABC dry chemical, or Protein type air foams.
Fire Fighting Procedures:	Not Applicable
Specific Hazards Arising from the Chemical:	Not Applicable
Precautions for Fire Fighters:	Not Applicable

# DENTSPLY Maillefer

<b>Recommended Protective Equipment for Fire Fighters:</b> Wear positive pressure self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and during cleanup in enclosed or poorly ventilated areas immediately after a fire.			
EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, PPE and Emergency Procedures:** For respiratory protection use proper approved respirator when exposure limits are exceeded. For ventilation protection use local exhaust when cutting, grinding or welding. Eye protection and protective clothing should be worn when cutting, grinding or welding.

**Environmental Precautions:** None

**Methods and Materials for Containment and Clean-up:** Residues from cutting or grinding should be swept or vacuumed and placed in suitable containers for disposal by local, state, or federal waste disposal regulations.

### Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	SKIN	SKIN	
			

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** None

**Conditions for Safe Storage:** Not Applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** Not Applicable

**Biological Exposure Limits:** Not Applicable

# DENTSPLY Maillefer

**Appropriate Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

## Individual Protection Measures (PPE)




**Specific Eye/face Protection:** : Surgical mask and eye protection

**Specific Skin Protection:** Gloves, material must be impermeable and resistant to the component

**Specific Respiratory Protection:** May be harmful if inhaled

**Specific Thermal Hazards:** Not Applicable

## Recommended Personal Protective Equipment

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

**Environmental Exposure Controls:** Not Applicable

**General Hygiene Considerations and Work Practices:** Not Applicable

**Protective Measures During Repair and Maintenance of Contaminated Equipment:** Not Applicable

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Silver	<b>Explosive limits:</b>	Not Available
<b>Odor:</b>	None reported	<b>Vapor pressure:</b>	Not Available
<b>Odor threshold:</b>	Not Applicable	<b>Vapor density:</b>	Not Available
<b>pH:</b>	7	<b>Relative density:</b>	4.5g/cc
<b>Melting/freezing point:</b>	1677°C	<b>Solubility:</b>	Negligible
<b>Initial boiling point and range:</b>	3277°C @ 760mm Hg	<b>Partition coefficient: n-octanol/water:</b>	Not Available
<b>Flash point:</b>	Not Available	<b>Auto-ignition temperature:</b>	Not Available
<b>Evaporation rate:</b>	Not Available	<b>Decomposition temperature:</b>	Not Available
<b>Flammability:</b>	Not Available	<b>Viscosity:</b>	Not Available
<b>Explosive Properties:</b>	Not Available	<b>Oxidizing Properties:</b>	Not Available

# DENTSPLY Maillefer

## 10. STABILITY AND REACTIVITY

**Reactivity:** None

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** No

**Conditions to Avoid:** None

**Incompatible materials:** mineral acids, halogens, carbon dioxide, strong oxidizing agents.

**Hazardous Decomposition Products:** Irritating and toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

**Signs and Symptoms of Overexposure:** None

**Emergency Overview:** Titanium is biocompatible.

Likely Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)	LD50 Testing Data (as applicable)	LC50 Testing Data (as applicable)
<b>Eye:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Skin:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Inhalation:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Ingestion:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Other:</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Medical Conditions Aggravated by Exposure:** None.

**Carcinogenicity:** None.

## 12. ECOLOGICAL INFORMATION

**Toxicity:** No hazards

**Persistence and Degradability:** Stable

**Bio-accumulative Potential:** None

**Mobility in Soil:** None

**Other Adverse Effects:** None

# DENTSPLY Maillefer

**Results of PBT/vPvB Assessment:** None

## 13. DISPOSAL CONSIDERATIONS

**Regulations:** Dispose of container and unused contents in accordance with federal, state and local requirements.

**Properties (Physical/Chemical) Affecting Disposal:** None

**Waste Treatment Recommendations:** None required.

## 14. TRANSPORT INFORMATION

**UN Identification Number:** Not Applicable

**UN Proper Shipping Name:** Not Applicable

**Transport hazard class(es):** Not regulated

**Packing Group:** III

**Special precautions for user:** None

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):** Not regulated

**Toxic Substances Control Act (TSCA):** Not regulated

**Clean Water Act (CWA):** Not regulated

**Clean Air Act (CAA):** Not regulated

**Superfund Amendments and Reauthorization Act (SARA) Title III Information:** None

**SARA Section 311/312 (40 CFR 370) Hazard Categories:** None

<b>Immediate Hazard:</b>	None	<b>Pressure Hazard:</b>	None
<b>Delayed Hazard:</b>	None	<b>Reactivity Hazard:</b>	None
<b>Fire Hazard:</b>	None		

# DENTSPLY Maillefer

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

## State Regulations

**California:** This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
None		

## International Regulations

**Canadian Environmental Protection Act:** None

**Canadian Workplace Hazardous Materials Information System (WHMIS):** None

**European Inventory of Existing Chemicals (EINECS):** None

## 16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3: None

Date of SDS Preparation/Revision: 05/07/14

Data Sources: DENSFIL TITANIUM OBTURATORS SDS Rev01 03/11/11