

# MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2009  
 MSDS No: BS1011  
 Date Revised: 04/29/2009  
 Revision No: 1

## Resilience® Primer-Activated Adhesive

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Resilience® Primer-Activated Adhesive  
**PRODUCT DESCRIPTION:** Primer-Activated Orthodontic Bonding Systems  
**PRODUCT CODE:** FC-RESI-012; FC-RESI-024; FC-RESI-026; FC-RESI-048  
**CHEMICAL FAMILY:** Aromatic and Aliphatic Dimethacrylate Monomers

#### MANUFACTURER

Ortho Technology, Inc.  
 17401 Commerce Park Boulevard  
 Tampa FL 33647  
**Product Stewardship:** 1-800-999-3161

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Off-White Paste with Characteristic Acrylate Odor.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**SKIN:** Repeated contact with skin may cause reddening and irritation.

**CARCINOGENICITY:** ND = No Data/Not Determined

**MEDICAL CONDITIONS AGGRAVATED:** Unknown

**ROUTES OF ENTRY:** Inhalation: Not Likely under normal use

Skin: Yes

Ingestion: Not Likely under normal use.

**HEALTH HAZARDS:** Unknown

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS
Aromatic and Aliphatic Dimethacrylate Monomers	N/A
Benzoyl Peroxide	94-36-0
2,6-DI-Tert-Butyl-P-Cresol (BHT)	128-37-0
Silicon Dioxide	7631-86-9
Sodium Fluoride	7681-49-4

### 4. FIRST AID MEASURES

**EYES:** Flush with copious amounts of water.

**SKIN:** Wash with soap and water.

# MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2009  
MSDS No: BS1011  
Date Revised: 04/29/2009  
Revision No: 1

## Resilience® Primer-Activated Adhesive

**INGESTION:** Seek Medical Attention.

**INHALATION:** Remove to fresh air.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** ND = No Data/Not Determined

**FLAMMABLE LIMITS:** ND = No Data/Not Determined to ND = No Data/Not Determined

**EXTINGUISHING MEDIA:** Dry Chemical Foam, CO<sub>2</sub>, Dry Chemical

**EXPLOSION HAZARDS:** Material may burn if exposed to flame

**FIRE FIGHTING EQUIPMENT:** Firefighters should wear full protective clothing and self-contained breathing apparatus.

**FIRE EXPLOSION:** Material may burn if exposed to flame

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Pick up the material with impervious gloves and place into an appropriate container.

#### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** May cause adverse environmental impact if material reaches waterways

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** To be handled by qualified dental professionals. Follow instructions for use

**STORAGE:** Avoid moisture contact in unpolymerized state.

**STORAGE TEMPERATURE:** Store at or below room temperature.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Safety glasses; splash goggles recommended.

**SKIN:** Wear gloves

**RESPIRATORY:** None required under normal use

**PROTECTIVE CLOTHING:** Wear lab coat

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Off-white paste

# MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2009  
MSDS No: BS1011  
Date Revised: 04/29/2009  
Revision No: 1

## Resilience® Primer-Activated Adhesive

**ODOR:** Characteristic acrylate odor

**COLOR:** Off-white

**VAPOR PRESSURE:** ND = No Data/Not Determined

**VAPOR DENSITY:** ND = No Data/Not Determined

**BOILING POINT:** ND = No Data/Not Determined

**MELTING POINT:** ND = No Data/Not Determined

**FLASHPOINT AND METHOD:** ND = No Data/Not Determined

**SOLUBILITY IN WATER:** Insoluble

**EVAPORATION RATE:** (Butyl acetate = 1) ND = No Data/Not Determined

**SPECIFIC GRAVITY:** (H<sub>2</sub>O = 1): > 1

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Hazardous polymerization may occur.

**CONDITIONS TO AVOID:** High Temperatures and UV Light.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon

**INCOMPATIBLE MATERIALS:** Strong Oxidizing and Reducing Agents and Peroxides.

### 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Irritation to the eyes can occur

**SKIN EFFECTS:** Irritation to the skin can occur

#### CARCINOGENICITY

**IARC:** ND = No Data/Not Determined

**NTP:** ND = No Data/Not Determined

**OSHA:** ND = No Data/Not Determined

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** May cause adverse environmental impact if material reaches waterways

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in Accordance with the Federal, State and Local Regulations.

# MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2009  
 MSDS No: BS1011  
 Date Revised: 04/29/2009  
 Revision No: 1

## Resilience® Primer-Activated Adhesive

### 14. TRANSPORT INFORMATION

**COMMENTS:** None required

### 15. REGULATORY INFORMATION

**GENERAL COMMENTS:** R21: Harmful in contact with skin; S24: Avoid contact with skin.

### 16. OTHER INFORMATION

**REASON FOR ISSUE:** New MSDS Format

**APPROVED BY:** J. Hutchins     **TITLE:** QA / RA Director

**PREPARED BY:** T. Swan

**INFORMATION CONTACT:** 1-800-999-3161

**REVISION SUMMARY:** Revision #: 1. This MSDS replaces the MSDS., , , , , , , , , , , Any changes in information are as follows: In Section 1: Approved by, Title, MSDS Number, Prepared By, Date  
 PreparedIn Section 2: Physical Appearance, Potential Health Effects - Eyes, Potential Health Effects - Skin, Potential Health Effects - Inhalation, Potential Health Effects - Ingestion, Signs & Symptoms - Eyes, Signs & Symptoms - Ingestion, Signs & Symptoms - Inhalation, Signs & Symptoms - Skin, Medical Conditions Aggravated, Routes of Entry, Health Hazards, CarcinogenicityIn Section 4: Firstaid - IngestionIn Section 5: (Group Field) for Auto Ignition, Lower °F, Upper °F, (Group Field) for Flash Point, Fire Fighting Equipment, Explosion Hazards, Fire ExplosionIn Section 6: Small Spill, Land Spill, Air SpillIn Section 7: (Group Field) for Storage Temperature, StorageIn Section 8: Skin ProtectionIn Section 9: Odor, (Group Field) for Vapor Pressure, (Group Field) for Vapor Pressure Density, (Group Field) for Boiling Point, (Group Field) for Freezing Point, (Group Field) for Melting Point, (Group Field) for Water Solubility, (Group Field) for Density, (Group Field) for Specific Gravity, (Group Field) for Evaporation RateIn Section 10: Polymerization, Conditions to Avoid, Incompatible Materials, Possibility of Hazardous ReactionsIn Section 11: IARC, NTP, OSHAIn Section 13: DisposalIn Section 16: HMIS Flammability, HMIS Health, NFPA Flammability, NFPA Health, NFPA Reactivity

**MANUFACTURER DISCLAIMER:** To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.