

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010  
Dental Use

**ULTRADENT**  
PRODUCTS, INC.

Date Issued : 08/28/2015  
SDS No : 377-001.2  
Date Revised : 06/16/2016  
Revision No : 1

## Thermo Clone™ Tray Adhesive

### SECTION 1 : Identification of the substance/preparation and of the company/undertaking

#### 1.1. Product identifier

Product code : 4074  
Product name : Thermo Clone™ Tray Adhesive  
Product description : Impression Tray Adhesive

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

Relevant identified uses : Professional Dental Impression Tray Adhesive

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

##### Manufacturer

Ultradent Products, Inc.  
505 W. 10200 S.  
South Jordan, UT 84095

##### Distributor

Ultradent Products GmbH  
Am Westhover Berg 30  
51149 Cologne Germany  
Email: infoDE@ultradent.com  
**Emergency Phone** : +49(0)2203-35-92-0

#### 1.4. Emergency telephone number

CHEMTREC (NORTH AMERICA) :(800) 424 - 9300  
(INTERNATIONAL) :+1(703) 527 - 3887

### SECTION 2: Hazards identification

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

##### Classification according to Regulation(EC) No 1272/2008 [CLP]

: The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.



**Health** : Skin Irritation, Category 2  
Eye Irritation, Category 2  
Target Organ Toxicity (Single exposure), Category 3

**Physical** : Flammable Liquids, Category 3

#### 2.2. Label elements

Hazardous components which must be listed on the label: ethyl acetate

##### Classification according to Regulation(EC) No 1272/2008 [CLP]

Hazard pictogram(s) :  

Exclamation mark      Flame

Signal Word : WARNING

Hazard statement(s) : H226: Flammable liquid and vapour.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.

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H336: May cause drowsiness or dizziness.

### Precautionary statement(s)

#### Prevention

: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240: Ground and bond container and receiving equipment.  
P243: Take action to prevent static discharges.

#### Response

: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P301: IF SWALLOWED:  
P315: Get immediate medical advice/attention.  
P330: Rinse mouth.  
P304: IF INHALED:  
P314: Get medical advice/attention if you feel unwell.

#### Storage

: P273: Avoid release to the environment.

#### Disposal

: P501: Dispose of in compliance with governmental regulation.(EC1975L0442-20/11/2003)

### 2.3. Other hazards

Immediate concerns : Highly Flammable

## SECTION 3: Composition / information on ingredients

### 3.1. Substances

Not Applicable

### 3.2. Mixtures

Chemical Name	CAS	EINECS No.	Wt.%	Classification according to Regulation(EC) No 1272/2008 [CLP]
Ethyl Acetate	141-78-6	205-500-4	25 - 50	Flam. Liq.,Cat. 2; Eye Irr.,Cat. 2; STOT SE,Cat. 3; H225; H319; H336
Xylene	1330-20-7	215-535-7	5 - 10	Acute Tox. (D),Cat. 4; Acute Tox. (I),Cat. 4; Skin Irr.,Cat. 2; Flam. Liq.,Cat. 3; H226; H312; H315; H332
Ethyl Benzene	100-41-4	202-849-4	≤ 5	Flam. Liq.,Cat. 2; Acute Tox. (I),Cat. 4; Asp. Haz.,Cat. 1; STOT RE,Cat. 2; Aquatic Chronic,Cat. 3; H225; H332; H304; H373; H412
Butyl Titanate IV	5593-70-4	227-006-8	≤ 5	Flam. Liq.,Cat. 3; Skin Irr.,Cat. 2; EYE DMG.,Cat. 1; H226; H315; H318

For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Following eyes** : Flush eyes with water for 5 minutes. Get medical attention if irritation develops or persists.

**Following skin** : Wash with soap and water.

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**Following ingestion** : If swallowed rinse mouth with water. Have victim drink large quantities of water and seek medical attention immediately.

**Following inhalation** : If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

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

**Eyes** : Irritating to eyes.

**Skin** : Has de-greasing effect on the skin.

**Ingestion** : May damage lungs if swallowed.

**Inhalation** : Harmful if inhaled

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

**Notes to physician** : Not Applicable

**SECTION 5: Fire fighting measures**

**5.1. Extinguishing media**

**Extinguishing media** : Carbon dioxide(CO2), Sand, Extinguishing powder

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

**Hazardous combustion products** : Special hazards arising from the substance or mixture  
In case of fire and/or explosion do not breathe fumes. Vapours may form explosive mixtures with air.

**5.3. Advice for firefighters**

**Fire fighting procedures** : General: Evacuate all personnel; use protective equipment for fire-fighting. Use self-contained breathing apparatus when the product is involved in fire.

**SECTION 6: Accidental release measures**

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

**General procedures** : Remove all sources of ignition. Wear personal protective equipment.

**6.2. Environmental precautions**

**Water spill** : Do not empty into drains or the aquatic environment.

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

**Large Spill** : Wipe up with absorbent material (eg cloth, fleece) Do not rinse down with water.

**6.4. Reference to other sections**

**Reference to other sections** : Not Applicable

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling** : Advice on safe handling  
Use only in well-ventilated areas. Keep away from sources of ignition. No smoking. Keep container tightly closed and in a well-ventilated place.  
Advice on protection against fire and explosion.  
Take precautionary measures against static discharges.  
Further information on handling: Provide fresh air.

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**Storage** : Keep container tightly closed and in a well-ventilated place. Protect against heat.

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

**Shelf life** : See product labeling

**7.3. Specific end use(s)**

**Specific end use(s)** : Professional Dental Impression Tray Adhesive

**SECTION 8: Exposure controls / personal protection**

**8.1. Control parameters**

**Control parameters**

: CAS No

Chemical Name

	Exposure routes	Method Dose	Species	Source
1330-20-7	Xylene			
	dermal	ATE 1100 mg/kg		
	inhalative vapour	ATE mg/l	11	
	inhalative aerosol	ATE mg/l	1.5	
100-41-4	ethylbenzene			
	oral	LD50 3500 mg/kg	Rat	GESTIS
	dermal	LD50 15400 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50 mg/l	17.2 Rat	
	inhalative aerosol	ATE mg/l	1.5	

Additional information on tests

Preparation not tested. No data available

Further information

Harmful by inhalation and if swallowed.

Hazards identification: Nausea. Headache. Vapours may cause drowsiness and dizziness.

After skin contact: Has de-greasing effect on skin.

Following eye contact: Irritant.

Harmful: may cause lung damage if swallowed.

**8.2. Exposure controls**

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<b>Engineering controls</b>	: Protective and hygiene measures Avoid contact with skin, eye and clothing. Change contaminated clothing. Wash hands before breaks and at the end of work. Protect skin by using skin protective cream.
<b>Eye/face protection</b>	: Framed glasses
<b>Skin protection</b>	: Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications. Hand protection: Suitable material: Butyl rubber.
<b>Respiratory protection</b>	: With correct and proper use, and under normal conditions, breathing protection is not required. Provide adequate ventilation.

**SECTION 9: Physical and chemical properties**

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

<b>Physical state</b>	: Liquid
<b>Colour</b>	: Blue
<b>Odour</b>	: Characteristic odor
<b>Boiling temperature</b>	: > 77°C
<b>Flash point</b>	: > -4°C
<b>Vapor pressure</b>	: < 102 hPa at 20°C
<b>Density</b>	: 1.05 - 1.1 g/cm <sup>3</sup>
<b>Solubility in water</b>	: Practically insoluble
<b>Auto-ignition temperature</b>	: > 400°C
<b>Explosive properties</b>	: Lower explosion limits: 2.1 vol % Upper explosion limits: 11.5 vol %

**9.2. Other information**

<b>Percent volatile</b>	: Formation of potentially explosive vapor/air mixture is possible.
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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

<b>Reactivity</b>	: Stable when stored and handled under recommended conditions.
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**10.2. Chemical stability**

<b>Chemical stability</b>	: Highly flammable. Vapors may form explosive mixtures with air.
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**10.3. Possibility of hazardous reactions**

<b>Hazardous polymerization</b>	: None
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**10.4. Conditions to avoid**

<b>Conditions to avoid</b>	: None by intended use.
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**10.5. Incompatible materials**

<b>Incompatible materials</b>	: None
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**10.6. Hazardous decomposition products**

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Hazardous decomposition products : None

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute**

**Notes** : xylene: Exposure Route: Dermal Method: ATE Dose: 1100mg/kg Exposure Route: Inhalative vapour Method: ATE Dose: 11mg/l Exposure Route: Inhalative Aerosol Method: ATE Dose: 1.5mg/l  
Ethyl Benzene: Exposure Route: Oral Method: LD50: 3500 mg/kg Species: Rat Source: GESTIS Exposure Routes: Dermal LD50: 15400mg/kg Species: Rabbit Source: GESTIS  
Exposure Route: Inhalative (4 h) vapour: LC50 17,2mg/l Species: Rat Exposure Route: Inhalative aerosol Method: ATE: 1,5mg/l  
Additional information on tests  
Preparation not tested. No data available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**Toxicity** : ethylbenzene: Aquatic toxicity: Acute algae toxicity Method: Erc50 Dose: 3.6 mg/l h: 96 Source: GESTIS

**Aquatic toxicity (acute)** : Do not allow to enter sewers or drains that may lead to waterways.

**12.2. Persistence and degradability**

**Persistence and degradability** : Not Available

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Partition coefficient n-octanol/water  
Ethyl Benzene Log Pow: 3.15

**12.4. Mobility in soil**

**Mobility in soil** : Not Available

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

**Results of PBT and vPvB assessment** : Not Available

**12.6. Other adverse effects**

**General comments** : Leakage into the environment must be prevented.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Product disposal** : Advice on disposal  
Do not remove with domestic waste. Do not empty into drains or the aquatic environment. Waste disposal according to official state regulations.  
Waste disposal number of waste from residues/unused products  
180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care): wastes from matal care, diagnosis, treatment of

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prevention of disease in humans; chemicals consisting of or containing dangerous substances.  
 Classified as hazardous waste.  
 Waste disposal number of used product  
 200399 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS, other municipal wastes; municipal wastes not otherwise specified  
 Contaminated packaging  
 Cleaned containers may be recycled.

**SECTION 14: Transport information**

**14.1. UN number**

UN number : 3295

**14.2. UN proper shipping name**

UN proper shipping name : Hydrocarbons, liquid, n.o.s.(mixture of Ethyl Acetate, Xylene, Ethyl Benzene, Butyl Titanate)

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

Hazard classification : 3

**14.4. Packing group**

Packing group : II

**14.5. Environmental hazards**

Marine pollutant #1 : NAP

**14.6. Special precautions for user**

ADR - road : NAP

RID - rail : NAP

IMDG - sea : Marine Transport (IMDG)

14.1. UN number: 3295

14.2. UN proper shipping name: Hydrocarbons, liquid, n.o.s.(mixture of Ethyl Acetate, Xylene, Ethyl Benzene, Butyl Titanate)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 2

Special Provisions: -

Limited Quantity: 1L

EmS: F-E, S-D

Other applicable information (marine transport)

E2

IATA - air : IATA-packing instructions- Passenger: 353

IATA-max. quantity - Passenger: 5L

IATA-packing instructions - Cargo: 364

IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

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Pasenger-LQ: Y305  
E2  
Passenger-LQ: Y341

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

Transport in bulk : NAP

**SECTION 15: Regulatory information**

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

RoHS General Information : Please refer to Medical Devices Directive 93/42/EEC

**15.2. Chemical safety assessment**

Chemical safety assessment : See Section 11

**SECTION 16: Other information**

Relevant H-statements (number and full text) : Acute Tox. (D), Cat. 4: Acute Toxicity (Dermal), Category 4  
Acute Tox. (I), Cat. 4: Acute Toxicity (Inhalation), Category 4  
Aquatic Chronic, Cat. 3: Chronic Hazards to the Aquatic Environment, Category 3  
Asp. Haz., Cat. 1: Aspiration Hazard, Category 1  
EYE DMG., Cat. 1: Eye Damage, Category 1  
Eye Irr., Cat. 2: Eye Irritation, Category 2  
Flam. Liq., Cat. 2: Flammable Liquids, Category 2  
Flam. Liq., Cat. 3: Flammable Liquids, Category 3  
STOT RE, Cat. 2: Target Organ Toxicity (Repeated exposure), Category 2  
STOT SE, Cat. 3: Target Organ Toxicity (Single exposure), Category 3  
Skin Irr., Cat. 2: Skin Irritation, Category 2  
H225: Highly flammable liquid and vapour.  
H226: Flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H318: Causes serious eye damage.  
H319: Causes serious eye irritation.  
H332: Harmful if inhaled.  
H336: May cause drowsiness or dizziness.  
H373: May cause damage to organs.  
H412: Harmful to aquatic life with long lasting effects.

Prepared by : Anu Kattoju

Revision summary : This SDS replaces the 08/28/2015 SDS. Revised: **Section 1:** Date-Revised, MSDS No. **Section 5:** EXPLOSION HAZARDS, EXTINGUISHING MEDIA, FIRE EXPLOSION, FIRE FIGHTING EQUIPMENT, SENSITIVE TO STATIC DISCHARGE, SENSITIVITY TO IMPACT. **Section 8:** ENGINEERING CONTROLS, PERSONAL PROTECTIVE EQUIPMENT ( EYES AND FACE, RESPIRATORY ), . **Section 9:** DENSITY. **Section 10:** STABLE. **Section 12:** CHEMICAL FATE INFORMATION, DISTRIBUTION, SECTION 12: Ecological information. **Section 14:** ROAD AND RAIL (ADR/RID) - PROPER SHIPPING



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NAME VESSEL (IMO/IMDG) - MARINE POLLUTANT #1 ROAD AND RAIL (UK only) (CDG) - SPECIAL PROVISIONS SECTION 14: Transport information, UN number, ADR - road, IMDG - sea, IATA - air. **Section 15:** RoHS. **Section 16:** Revision Summary, GENERAL STATEMENTS.

**General statements**

: NAP = Not Applicable

**Additional SDS information**

: Revision #:1

**Manufacturer disclaimer**

: FOR DENTAL USE ONLY: Use as directed. The information and recommendations are taken from sources (raw material SDS(s) and manufacturer's knowledge) believed to be accurate; however, the manufacturer, makes no warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof. Each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.