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



Date Issued : 01/21/2010 **SDS No :** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

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

1.1. Product identifier

Product code : AZ/71161, BL/71050

Product name : Opal® Bond™ Flow, Opal® Bond™ Flow Blue

Product description: Light-Cured Bonding Adhesive

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

Relevant identified uses: Professional Orthodontic Adhesive

1.3. Details of the supplier of the safety data sheet

Manufacturer

Opal® Orthodontics 505 W 10200 S

South Jordan, UT 84095

Distributor

MPG Service GmbH Gereonstrasse 34-36 D-50670 Cologne, Germany

Email: mpgservicekoeln@googlemail.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 Directive 1999/45/EC

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

Danger symbols: Xi

R phrases : R36/38

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

Health : Eye Irritation, Category 2 Skin Irritation, Category 2

2.2. Label elements

Classification according to Directive 1999/45/EC

Hazard pictogram(s) : Xi



R&S statement(s) : R36/38: Irritating to eyes and skin.

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



Date Issued : 01/21/2010 **SDS No :** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

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

Hazard pictogram(s)

Exclamation

mark
Signal Word : WARNING

Hazard statement(s) : H319: Causes serious eye irritation.

H315: Causes skin irritation.

Precautionary statement(s)

Prevention: P280: Wear protective gloves/protective clothing/eye protection/face

protection.

Response : P305: IF IN EYES:

P351: Rinse cautiously with water for several minutes.

P315: Get immediate medical advice/attention.

P302+P352: IF ON SKIN: Wash with plenty of soap and water. P332+P313: If skin irritation occurs: Get medical advice/attention.

P301: IF SWALLOWED: P330: Rinse mouth.

P331: Do NOT induce vomiting.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage : P273: Avoid release to the environment.

Disposal: P501: Dispose of in compliance with governmental regulation. (EC

1975L0442-20/11/2003)

2.3. Other hazards

Immediate concerns : None

SECTION 3: Composition / information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

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



Date Issued : 01/21/2010 **SDS No :** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

Chemical Name	CAS	EINECS No.	Wt.%	Classification according to Directive 67/548/EEC	Classification according to Regulation(EC) No 1272/2008 [CLP]
Bis-GMA	1565-94-2	216-367-7	< 10	Xi; R36/37/38; R22	H315; H319; H317
Bis EMA	41637-38-1	N/A	< 15	Xi; R36/37/38; R43	Skin Irr.,Cat. 2; Skin Sens.,Cat. 1; Eye Irr.,Cat. 2; STOT SE,CAT 3; H315; H317; H319; H335
Triethylene glycol dimethacrylate	109-16-0	203-652-6	< 15	Xi; R43	Not classified
Aluminum Oxide	1344-28-1	215-691-6	< 5	Xi; R36/37	Not classified

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Following eyes: Immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical attention.

Following skin: Wash with soap and water. Get medical attention if irritation develops

or persists.

Following ingestion: If swallowed in small quantity the product is harmless, otherwise

consult a doctor.

Following inhalation: No specific treatment is necessary since this material is not likely to be

hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other

symptoms develop.

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

Eyes : Contact may cause eye irritation.

Skin : May cause skin irritation.

Ingestion : None expected for this product.Inhalation : None expected for this product.

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

Notes to physician : Not Applicable

SECTION 5: Fire fighting measures

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



Date Issued : 01/21/2010 **SDS No :** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

5.1. Extinguishing media

Extinguishing media : Please see Fire Fighting Equipment under Section 5.3.

5.2. Special hazards arising from the substance or mixture

Explosion hazards : Not Determined
Fire explosion : Not Determined
Sensitive to static discharge : Not Determined
Sensitivity to impact : Not Determined

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.

Fire fighting equipment: Foam, dry chemical, carbon dioxide (CO₂).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General procedures: Refer to Section 8 for Personal Protective Equipment.

6.2. Environmental precautions

Water spill: Do not allow to enter sewers or drains that may lead to waterways.

6.3. Methods and material for containment and cleaning up

Small spill: Pick up wash liquid with additional absorbent and place in a disposable

container.

Large spill : Collect in tightly closed containers.

6.4. Reference to other sections

Reference to other sections: Not Applicable

SECTION 7: Handling and storage

7.1. Precautions for safe handling

General procedures: Avoid contact with eyes, skin and clothing.

Handling : Use suitable protective equipment.

Storage: See product labeling.

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 Orthodontic Adhesive

SECTION 8: Exposure controls / personal protection

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



Date Issued: 01/21/2010 **SDS No:** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

8.1. Control parameters

: Not Determined **Control parameters**

8.2. Exposure controls

Eye/face protection : Wear eye protection

Skin protection : Wear suitable protective clothing and gloves.

Respiratory protection : Good general ventilation should be sufficient to control airborne levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Resin paste Colour : Tan or blue **Odour** : Acrylic

9.2. Other information

Percent volatile : Not Determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : Stable

10.2. Chemical stability

Chemical stability : Stable when stored and handled under recommended conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization : None

10.4. Conditions to avoid

Conditions to avoid : Heat, flames, ignition sources, direct light, and incompatibles.

10.5. Incompatible materials

Incompatible materials : Not Determined

10.6. Hazardous decomposition products

Hazardous decomposition

products

: Not Determined

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute

Notes : Device is biocompatible when used as directed by dental professionals

per ISO 10993-1.

SECTION 12: Ecological information

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



Date Issued : 01/21/2010 **SDS No :** 75-001.8

Date Revised : 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

12.1. Toxicity

Toxicity : Not Determined

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

96-hour LC50: Not Determined48-hour EC50: Not Determined96-hour EC50: Not Determined

12.2. Persistence and degradability

Persistence and degradability : Not Determined

12.3. Bioaccumulative potential

Bioaccumulative potential : Not Determined

12.4. Mobility in soil

Mobility in soil : Not Determined

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB :

assessment

: Not Determined

12.6. Other adverse effects

Environmental data : Do not flush to sewer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal method: Dispose of in compliance with governmental regulation. (EC

1975L0442-20/11/2003)

SECTION 14: Transport information

14.1. UN number

UN number : N/A

14.2. UN proper shipping name

UN proper shipping name : Not Dangerous Goods

14.3. Transport hazard class(es)

Hazard classification : N/A

14.4. Packing group

Packing group : N/A

14.5. Environmental hazards

Marine pollutant #1 : N/A

14.6. Special precautions for user

ADR - road : Not Dangerous Goods

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



Date Issued: 01/21/2010 **SDS No:** 75-001.8

Date Revised: 09/15/2015

Revision No: 9

Opal® Bond™ Flow, Opal® Bond™ Flow Blue

RID - rail : Not Dangerous Goods IMDG - sea : Not Dangerous Goods IATA - air : Not Dangerous Goods

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

Transport in bulk : Not Dangerous Goods

SECTION 15: Regulatory information

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

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

15.2. Chemical safety assessment

: See Section 11 **Chemical safety assessment**

Additional information : This product is not considered dangerous for transportation

SECTION 16: Other information

Relevant R-phrases and/or Hstatements (number and full

text)

: R22: Harmful if swallowed.

R36/37/38: Irritating to eyes, respiratory system and skin.

R36/37: Irritating to eyes and respiratory system. R43: May cause sensitization by skin contact. Eye Irr., Cat. 2: Eye Irritation, Category 2

STOT SE, CAT 3: Target Organ Toxicity (Single exposure), Respiratory

Tract Category 3

Skin Irr., Cat. 2: Skin Irritation, Category 2 Skin Sens., Cat. 1: Skin Sensitization, Category 1

H315: Causes skin irritation.

H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H335: May cause respiratory irritation.

Prepared by : Anu Kattoju

Revision summary : This SDS replaces the 07/18/2014 SDS. Revised: **Section 1**:

> . **Section 2:** EMERGENCY OVERVIEW - IMMEDIATE CONCERNS. Section 4: SKIN. Section 7: GENERAL

PROCEDURES. Section 8: PERSONAL PROTECTIVE EQUIPMENT (RESPIRATORY). Section 10: HAZARDOUS POLYMERIZATION, STABLE, POSSIBILITY OF HAZARDOUS REACTIONS. Section 11: ACUTE (ORAL LD₅₀ (rat), INHALATION LC₅₀ (rat) ACUTE. **Section** 12: ECOTOXICOLOGICAL INFORMATION, AQUATIC TOXICITY (ACUTE). Section 14: ROAD AND RAIL (ADR/RID) - PROPER SHIPPING NAME ROAD AND RAIL (UK only) (CDG) - SPECIAL

PROVISIONS SECTION 14: Transport information, ADR - road, IMDG sea, IATA - air. **Section 15:** COMMENTS, SECTION 15: Regulatory

information. Section 16: GENERAL STATEMENTS.

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



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General statements Manufacturer disclaimer

- : N/A= Not Applicable
- : FOR ORTHO 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.