KIT SAFETY DATA SHEET

Document id : 16-2809-8

Issue date

Version

: 4.00

Issue date : 23/08/2007 Supersedes date : 01/03/2006

Dear Customer,

This is the cover sheet for the KIT MSDS.

You will find the document numbers of the MSDS that belong to the kit here on this page.

1 INFORMATION REGARDING KIT

1.1 Tradename:

3M ESPE Photac-Fil Quick/ Photac-Fil Quick Aplicap

- 1.2 Intended Use of Product: Dental restorative.
- 1.3 3M Product ID: 70-2011-0415-8
- 1.4 Contact Address:

3M UK PLC

3M Centre, Cain Road,

Bracknell, Berkshire, RG12 8HT

3M Ireland

3M House, Adelphi Centre, Dun Laoghaire, Co. Dublin

1.5 E-mail Address and Emergency Contact Number: tox.uk@mmm.com

+44 (0)1344 858 000

1.6 Kit Components:

16-2807-2 3M Photac-Fil Quick/ Photac-Fil Quick Aplicap Liquid 16-2808-0 3M Photac-Fil Quick/ Photac-Fil Quick Aplicap Powder

2 KIT LABEL

SAFETY DATA SHEET

Document id : 16-2807-2

Issue date

Version

: 5.00

Issue date : 23/08/2007 Supersedes date : 01/03/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Tradename:

3M Photac-Fil Quick/ Photac-Fil Quick Aplicap Liquid

1.2 Intended Use of Product:

Dental restorative

1.3 3M Product ID:

Component only. This can only be purchased as part of a kit.

1.4 Contact Address:

3M UK PLC

3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT

3M Ireland

3M House, Adelphi Centre,

Dun Laoghaire, Co. Dublin

1.5 E-mail Address and Emergency Contact Number:

tox.uk@mmm.com

+44 (0)1344 858 000

2 HAZARDS IDENTIFICATION

Risk Phrases:

R36/38 R43

Irritating to eyes and skin.

May cause sensitisation by skin contact.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification	CAS number	Percentage
2-Hydroxyethyl methacrylate EU Number: EINECS 212-782-2 EU Classification: Xi: R36/38; R4	868-77-9	25 - 50
EU Nota: D Acrylic acid-maleic acid copoymer	29132-58-9	30 - 50
EU Classification: EU-3M Classifi		22
Water EU Number: EINECS 231-791-2	7732-18-5	20 - 30
7,7,9(or 7,9,9)-Trimethyl-4,13- dioxo-3,14-dioxa-5,12-	72869-86-4	3 - 10
diazahexadecane-1,16-diyl		
bismethacrylate EU Number: EINECS 276-957-5 Vendor Classification: R52/53		
Magnesium hema ester		5 - 10

4 FIRST-AID MEASURES

4.1 Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

4.2 Skin Contact:

Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and shoes before reuse.

4.3 Inhalation:

Remove person to fresh air. If signs/symptoms develop, get medical attention.

4.4 Ingestion:

Do not induce vomiting. Get immediate medical attention. Give victim two glasses of water. Never give anything by mouth to an unconscious person.

5 FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media:

Use fire extinguishers with class B extinguishing agents (e.g. dry chemical, carbon dioxide).

- 5.2 Unsuitable Extinguishing Media: Not specified.
- 5.3 Exposure Hazards: Not determined.
- 5.4 Combustion Products from Fire: Not determined.
- 5.5 Fire-Fighting Procedures: Wear full protective equipment and a self-contained breathing apparatus.
- 5.6 Special Instructions: Not applicable.

6 ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions: Please observe precautions from other sections of this MSDS.
- 6.2 Methods for Cleaning up: Ventilate the area with fresh air. Contain spill. Collect as much of the spilled material as possible. Clean up residue. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

- 7.1 Precautions for Safe Handling: Not specified.
- 7.2 Precautions for Safe Storage:
- Incompatible Materials/Conditions: Store away from heat. Store out of direct sunlight.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Recommended Ventilation: Not applicable.
- 8.2 Exposure Limits: None of the substances in the section 3 ingredient list are listed in the EH40 Exposure Limit Inventory.
- 8.3 Exposure Controls:
- 8.3.1 Eye Protection: Avoid eye contact. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Safety glasses with side shields.
- 8.3.2 Hand Protection:

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove.

- 8.3.3 Skin Protection: Avoid skin contact.
- 8.3.4 Respiratory Protection: Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.
- 8.3.5 Ingestion: Do not ingest.
- 8.3.6 Special Instructions: See Sect. 7.1 for more information on skin protection.

9 PHYSICAL AND CHEMICAL PROPERTIES

Slightly yellow liquid with a - Appearance and Odour:

slight acrylate odour.

- pH: Not determined

- Boiling point/boiling range: 100 OC

- Melting point/melting range: Not determined

Not applicable - Flash point:

Not determined - Autoflammability:

- Flammable Limits - LEL: Not applicable

Not applicable - Flammable Limits - UEL:

2266 Pa - Vapour pressure:

Complete - Water Solubility:

- Specific gravity: >= 1 (Water=1)

- Vapour density: <= 1 (Air=1)

Not determined - Volatile organic compounds:

1 1 - Evaporation rate:

Not applicable - Viscosity:

Not determined - Percent Volatile:

10 STABILITY AND REACTIVITY

- 10.1 Stability and Reactivity: Stable. Hazardous polymerisation will not occur.
- 10.2 Conditions to Avoid: Heat.
- 10.3 Materials to Avoid: None known.
- 10.4 Hazardous Decomposition:

Carbon monoxide - During Combustion. Carbon dioxide - During Combustion. Irritant vapours or gases - During Combustion.

11 TOXICOLOGICAL INFORMATION

11.1 Effects from Eye Contact:

- Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
- 11.2 Effects from Skin Contact:
 - Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.
 - Moderate Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.
- 11.3 Effects from Inhalation:
 - Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- 11.4 Effects from Ingestion:
 - Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.
- 11.5 Other Effects and Information: Not specified.

12 ECOLOGICAL INFORMATION

- 12.1 Environmental Data: Not determined.
- 12.2 Mobility in Soil and Water: Not determined.
- 12.3 Persistence/Biodegradability: Not determined.
- 12.4 Bioaccumulation Potential: Not determined.
- 12.5 Ecotoxicity Data: Not determined.
- 12.6 Ecofate Data: Not determined.
- 12.7 Special statements for 2001/58/EC: A conservative assessment indicates this product presents a low environmental risk. Components released to the environment through use and disposal are expected to have minimal environmental impact.

13 DISPOSAL CONSIDERATIONS

- 13.1 Product as Sold:
 - Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.
- 13.2 Product in Use: Not determined.

- 13.3 Product after Use: Not determined.
- 13.4 Product Packaging: Not determined.
- 13.5 Potential for Recycling: Not determined.
- 13.6 Special Instructions: Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

- UN number:

Not restricted for transportation.

15 REGULATORY INFORMATION

Label Version Number:

02.00

Symbol(s):

Xi

Irritant.

Risk Phrases:

R36/38

Irritating to eyes and skin.

R43

May cause sensitisation by skin contact.

Safety Phrases:

S24/25

Avoid contact with the skin and eyes.

937

Wear suitable gloves.

526

In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

S28B

After contact with skin, wash immediately with plenty

of water.

Disclosable Ingredients:

2-Hydroxyethyl methacrylate;

Acrylic acid-maleic acid copoymer.

Product Certifications:

EINECS.

16 OTHER INFORMATION

16.1 Complete list of risk phrases:

Irritating to eyes. R3B Irritating to skin.

May cause sensitisation by skin contact. R43

R52 Harmful to aquatic organisms.

R53 May cause long-term adverse effects in the aquatic environment.

16.2 Limitations on Use of Product:

For use only by dental professionals.

16.3 Reissue date/Reason for reissue:

Complete MSDS revision in accordance with EU directive 2001/58/EC.

16.4 Regulatory Information:

The following UK Regulations as amended may affect the product as supplied:

The Chemicals (Hazard Information and Packaging for supply)

Regulations, as amended;

The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996, as amended;

The Control of Substances Hazardous to Health Regulations 1999 as amended:

The Special Waste Regulations 1996, as amended; The Environmental Protection Act, 1990, as amended; The Health and Safety at Work Act, 1974, as amended.

The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

SAFETY DATA SHEET

Document id

: 16-2808-0

Issue date

: 23/08/2007

Version

: 5.00

Supersedes date : 01/03/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Tradename:

3M Photac-Fil Quick/ Photac-Fil Quick Aplicap Powder

1.2 Intended Use of Product:

Dental restorative

1.3 3M Product ID:

Component only. This can only be purchased as part of a kit.

1.4 Contact Address:

3M UK PLC

3M Ireland

3M House, Adelphi Centre,

3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT

Dun Laoghaire, Co. Dublin

1.5 E-mail Address and Emergency Contact Number:

tox.uk@mmm.com

+44 (0) 1344 858 000

2 HAZARDS IDENTIFICATION

Risk Phrases:

None.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification	CAS number	Percentage
Glass, oxide, chemicals EU Number: EINECS 266-046-0	65997-17-3	> 99

4 FIRST-AID MEASURES

4.1 Eye Contact:

Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

4.2 Skin Contact:

Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

4.3 Inhalation:

Remove person to fresh air. If signs/symptoms develop, get medical attention.

4.4 Ingestion:

No need for first aid is anticipated.

5 FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media:

Non-combustible. Choose material suitable for surrounding fire.

5.2 Unsuitable Extinguishing Media: Not specified.

5.3 Exposure Hazards:

Not determined.

5.4 Combustion Products from Fire:

Not determined.

5.5 Fire-Fighting Procedures:

Wear full protective equipment and a self-contained breathing apparatus.

5.6 Special Instructions:

Not applicable.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions:

Please observe precautions from other sections of this MSDS.

6.2 Methods for Cleaning up:

Collect as much of the spilled material as possible.

Clean up residue.

Collect the resulting residue containing solution.

Place in a closed container approved for transportation by appropriate authorities.

Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Not specified.

7.2 Precautions for Safe Storage: Not specified.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Recommended Ventilation: Not applicable.
- 8.2 Exposure Limits: None of the substances in the section 3 ingredient list are listed in the EH40 Exposure Limit Inventory.
- 8.3 Exposure Controls:
- 8.3.1 Eye Protection: Avoid eye contact. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Safety glasses with side shields.
- 8.3.2 Hand Protection: Not specified.
- 8.3.3 Skin Protection: Gloves not normally required. Avoid prolonged or repeated skin contact.
- 8.3.4 Respiratory Protection: Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.
- 8.3.5 Ingestion: Do not ingest.

9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance and Odour:	Different coloured, odourless fine powder (less than 10um in diameter)	
- рн:	Not applicable	
- Boiling point/boiling range:	Not applicable	
- Melting point/melting range:	Not determined	
- Flash point:	Not applicable	
- Autoflammability:	Not determined	
- Flammable Limits - LEL:	Not applicable	
- Flammable Limits - UEL:	Not applicable	
- Vapour pressure:	Not applicable	
- Water Solubility:	Nil	
- Specific gravity:	>= 1 (Water=1)	
- Vapour density:	Not applicable	
- Volatile organic compounds:	Not applicable	

- Evaporation rate:

Not applicable

- Viscosity:

Not applicable

- Percent Volatile:

Not applicable

10 STABILITY AND REACTIVITY

- 10.1 Stability and Reactivity: Stable. Hazardous polymerisation will not occur.
- 10.2 Conditions to Avoid: None known.
- 10.3 Materials to Avoid: None known.
- 10.4 Hazardous Decomposition: None known - During Combustion.

11 TOXICOLOGICAL INFORMATION

- 11.1 Effects from Eye Contact:
 - Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.
- 11.2 Effects from Skin Contact: Contact with the skin during product use is not expected to result in significant irritation.
- 11.3 Effects from Inhalation:

Prolonged or repeated exposure may cause:

- Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- 11.4 Effects from Ingestion: No health effects are expected.
- 11.5 Other Effects and Information: Not specified.

12 ECOLOGICAL INFORMATION

- 12.1 Environmental Data: Not determined.
- 12.2 Mobility in Soil and Water: Not determined.
- 12.3 Persistence/Biodegradability: Not determined.
- 12.4 Bioaccumulation Potential: Not determined.
- 12.5 Ecotoxicity Data: Not determined.
- 12.6 Ecofate Data: Not determined.
- 12.7 Special statements for 2001/58/EC:

A conservative assessment indicates this product presents a low environmental risk. Components released to the environment through use and disposal are expected to have minimal environmental impact.

13 DISPOSAL CONSIDERATIONS

- 13.1 Product as Sold: Dispose of waste product in a facility permitted to accept chemical waste.
- 13.2 Product in Use: Not determined.
- 13.3 Product after Use: Not determined.
- 13.4 Product Packaging: Not determined.
- 13.5 Potential for Recycling: Not determined.
- 13.6 Special Instructions: Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

- UN number:

Not restricted for transportation.

15 REGULATORY INFORMATION

Label Version Number: 01.00

Symbol(s):

None.

Risk Phrases: None.

Safety Phrases:

S24/25

Avoid contact with the skin and eyes.

826

In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

S28A

After contact with skin, wash immediately with plenty

of soap and water.

S51

Use only in well ventilated areas.

Disclosable Ingredients:

No ingredients required on the label.

Product Certifications: EINECS.

16 OTHER INFORMATION

- 16.1 Complete list of risk phrases: None.
- 16.2 Limitations on Use of Product:

For use only by dental professionals.

16.3 Reissue date/Reason for reissue: Complete MSDS revision in accordance with EU directive 2001/58/EC.

16.4 Regulatory Information:

The following UK Regulations as amended may affect the product as supplied:

The Chemicals (Hazard Information and Packaging for supply) Regulations, as amended;

The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and use of Transportable Pressure Receptacles Regulations 1996, as amended;

The Control of Substances Hazardous to Health Regulations 1999 as amended;

The Special Waste Regulations 1996, as amended; The Environmental Protection Act, 1990, as amended; The Health and Safety at Work Act, 1974, as amended.

The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.