Permatex Europe Unit 3, Express Park, Shipton Way, Northampton Road, Rushden, Northamptonshire NN10 6GK UK

Ph: 0870 4589545

SAFETY DATA SHEET according to REACH regulation 1907/2006

1. IDENTIFICATION OF THE PREPARATION

Identification of the 81668 STRIPPED THREAD REPAIR PART 1

preparation:

Item No: 390220D Recommended use: **Adhesive**

2. HAZARDS IDENTIFICATION

Classification: Xi - Irritant, N - Dangerous for the environment

Most Important Hazards: Irritating to eyes and skin. May cause irritation of respiratory tract. Very toxic

to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	EC Number	EU Classification
ETHOXYLATED BISPHENOL A DIMETHACRYLATE 24448-20-2	50-70	246-263-7	N;R50/53
ALUMINIUM POWDER 7429-90-5	20-40	231-072-3	F;R15-17
ACRYLIC ACID 79-10-7	<5	201-177-9	R10 Xn; R20/21/22 C; R35 N; R50
TETRAHYDROFURFURYL METHACRYLATE 2455-24-5	<5	219-529-5	None
SILICON DIOXIDE, AMORPHOUS 112945-52-5	<5	231-545-4	None

4. FIRST-AID MEASURES

General advice: If you feel unwell, seek medical advice (show the label where possible). Inhalation:

Move to fresh air in case of accidental inhalation of vapours. Oxygen or

artificial respiration if needed. Obtain medical attention.

Wash off with soap and water. If skin irritation persists, call a physician. **Skin Contact:** In the case of contact with eyes, rinse immediately with plenty of water and **Eye Contact:**

seek medical advice.

If swallowed, seek medical advice immediately and show this container or Ingestion:

Protection of first-aiders: Use personal protective equipment. Avoid contact with skin, eyes and

clothing.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide (CO2), Dry chemical, foam

Product Name: 81668 STRIPPED THREAD REPAIR Item No: 390220D

PART 1

5. FIRE-FIGHTING MEASURES

Extinguishing media which Water.

must not be used for safety

reasons:

Special instructions for Keep from any possible contact with water, because of reaction and possible

protection and hygiene: flash fire.

Special protective equipment Use personal protective equipment. Avoid contact with eyes.

for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: For additional information on processing see sections 7, 8 and 11 of this

safety data sheet.

Environmental Precautions: Do not flush into surface water or sanitary sewer system.

Cleanup: Absorb spill with inert material (e.g. dry sand or earth), then place in a

chemical waste container.

7. HANDLING AND STORAGE

Handling precautions: Avoid breathing vapors or mists. Avoid contact with the skin and the eyes.

Wash hands before breaks and immediately after handling the product.

Storage: Store in cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH; TLV-TWA	German MAK; TWA	UK WEL; TWA	Finnish OEL; HTP
ETHOXYLATED BISPHENOL A DIMETHACRYLATE 24448-20-2	Not listed	Not listed	Not listed	Not listed
ALUMINIUM POWDER 7429-90-5	1 mg/m ³	1.5 mg/m ³	4 mg/m ³	Not listed
ACRYLIC ACID 79-10-7	2 ppm	10 ppm; 30 mg/m ³	Not listed	8h: 2 ppm: 6 mg/m ³ 15 min: 15 ppm, 45 mg/m ³
TETRAHYDROFURFURYL METHACRYLATE 2455-24-5	Not listed	Not listed	Not listed	Not listed
SILICON DIOXIDE, AMORPHOUS 112945-52-5	5 mg/m ³ , TWA	4 mg/m ³ , TWA	6 mg/m ³ , TWA	8h: 5 mg/m ³

Ventilation: Provide adequate ventilation.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Skin: Neoprene or nitrile gloves recommended.

Eyes: Safety glasses

Hygiene Measures: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grey liquid Odor: MILD

pH: Does not apply

Boiling point/range: >150°C

Melting point: Not determined

Flash point: >95°C

Risk of explosion: None reasonably foreseeable.

Vapor pressure:<5 mm Hg</th>Density:1.39Solubility in water:Slight

Product Name: 81668 STRIPPED THREAD REPAIR Item No: 390220D

PART 1

9. PHYSICAL AND CHEMICAL PROPERTIES

Partition coefficient (n- Not determined

octanol/water):

Vapor density: Not determined Evaporation Rate: Not determined

VOC Content(%): <10%

10. STABILITY/REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Heat

Materials to avoid: Strong oxidizers, free radical initiators, inert gases

Hazardous decomposition Carbon oxides, nitrogen oxides (NOx)

products:

11. TOXICOLOGICAL INFORMATION

Component	Weight%	LD50/oral/rat	LC50/inhalation/rat
ACRYLIC ACID	<5	33.5 mg/kg	3.6 mg/L/4H; 1202 ppm/4H
79-10-7 SILICON DIOXIDE. AMORPHOUS	<5	3160 mg/kg	
112945-52-5		1	

Local Effects

Skin Irritation: May cause skin irritation and/or dermatitis.

Eye Irritation: Irritating, but will not permanently injure eye tissue...

Inhalation: May cause irritation of respiratory tract. **Ingestion:** Irritating to mouth, throat and stomach.

Sensitization: None reasonably foreseeable. **Chronic toxicity:** None reasonably foreseeable

Specific Effects

Carcinogenic effects:None reasonably foreseeable.Mutagenic effects:None reasonably foreseeable.Reproductive toxicity:None reasonably foreseeableTarget Organ Effects:Eyes, Skin, Respiratory System

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste from Residues: According to the European Waste Catalogue, Waste Codes are not product

specific, but application specific. Waste codes should be assigned by the

user based on the application for which the product was used.

14. TRANSPORT INFORMATION

IATA

Proper Shipping Name: Not regulated Hazard Class: Not applicable Not applicable

IMDG

Proper shipping name: Not applicable Hazard Class: Not applicable UN/ID No: Not applicable

Marine Pollutant: None

Product Name: 81668 STRIPPED THREAD REPAIR <u>Item No:</u> 390220D

PART 1

14. TRANSPORT INFORMATION

ADR/RID

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s., (methacrylate ester)

Hazard Class: Class 9, PGIII UN/ID No: UN 3082

ADR/RID: Limited Quantity; LQ7

15. REGULATORY INFORMATION

This product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of Danger:

Xi - Irritant, N - Dangerous for the environment

R -phrase(s):

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

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment **S**-phrase(s):

S 2 - Keep out of the reach of children

S24/25 - Avoid contact with skin and eyes

S37 - Wear suitable gloves

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

16. OTHER INFORMATION

Risk Phrases mentioned in Section 2:

R10 - Flammable.

R15 - Contact with water liberates extremely flammable gases.

R17 - Spontaneously flammable in air.

R35 - Causes severe burns.

R50 - Very toxic to aquatic organisms.

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Prepared By: Denise Boyd, Manager
Revision Date: January/30/2008

Environmental, Health & Safety

Company: Permatex. Inc. 10 Columbus Revision Number: 8

Blvd. Hartford, CT USA 06106

Telephone: 877-376-2839

Permatex Europe Unit 3, Express Park, Shipton Way, Northampton Road, Rushden, Northamptonshire NN10 6GK UK

Ph: 0870 4589545

SAFETY DATA SHEET according to REACH regulation 1907/2006

1. IDENTIFICATION OF THE PREPARATION

Identification of the 81668 STRIPPED THREAD REPAIR PART 2

preparation:

Item No: 390222D Recommended use: Activator

2. HAZARDS IDENTIFICATION

Classification: N - Dangerous for the environment

Most Important Hazards: Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	EC Number	EU Classification
ETHOXYLATED BISPHENOL	50-70	246-263-7	N;R50/53
A DIMETHACRYLATE			
24448-20-2			
ALUMINIUM POWDER	20-40	231-072-3	F;R15-17
7429-90-5			
SILICON DIOXIDE,	<5	231-545-4	None
AMORPHOUS			
112945-52-5			
TETRAHYDROFURFURYL	<5	219-529-5	None
METHACRYLATE			
2455-24-5			

4. FIRST-AID MEASURES

General advice: If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Obtain medical

attention.

Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In the case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

Ingestion: If swallowed, seek medical advice immediately and show this container or

label.

Protection of first-aiders: Use personal protective equipment. Avoid contact with skin, eyes and

clothing.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide (CO2), Dry chemical, foam

Extinguishing media which Water.

must not be used for safety

reasons:

Special instructions for Keep from any possible contact with water, because of reaction and possible

protection and hygiene: flash fire.

Product Name: 81668 STRIPPED THREAD REPAIR Item No: 390222D

PART 2

5. FIRE-FIGHTING MEASURES

Special protective equipment Use personal protective equipment. Avoid contact with eyes.

for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: For additional information on processing see sections 7, 8 and 11 of this

safety data sheet.

Environmental Precautions: Do not flush into surface water or sanitary sewer system.

Cleanup: Absorb spill with inert material (e.g. dry sand or earth), then place in a

chemical waste container.

7. HANDLING AND STORAGE

Handling precautions: Avoid breathing vapors or mists. Avoid contact with the skin and the eyes.

Wash hands before breaks and immediately after handling the product.

Storage: Store in cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH; TLV-TWA	German MAK; TWA	UK WEL; TWA	Finnish OEL; HTP
ETHOXYLATED BISPHENOL	Not listed	Not listed	Not listed	Not listed
A DIMETHACRYLATE				
24448-20-2				
ALUMINIUM POWDER	1 mg/m ³	1.5 mg/m ³	4 mg/m ³	Not listed
7429-90-5				
SILICON DIOXIDE,	5 mg/m³, TWA	4 mg/m ³ , TWA	6 mg/m ³ , TWA	8h: 5 mg/m ³
AMORPHOUS				
112945-52-5				
TETRAHYDROFURFURYL	Not listed	Not listed	Not listed	Not listed
METHACRYLATE				
2455-24-5				

Ventilation: Provide adequate ventilation .

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Skin: Neoprene or nitrile gloves recommended.

Eyes: Safety glasses

Hygiene Measures: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue liquid Odor: MILD

pH: Does not apply **Boiling point/range:** >150°C

Melting point:

Not determined

Flash point: >95°C

Risk of explosion: None reasonably foreseeable.

Vapor pressure: <5 mm Hg
Density: 1.37
Solubility in water: Slight

Partition coefficient (n- Not determined

octanol/water):

Vapor density:

Evaporation Rate:

Not determined

Not determined

VOC Content(%): <5%

Product Name: 81668 STRIPPED THREAD REPAIR Item No: 390222D

PART 2

10. STABILITY/REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Heat

Materials to avoid: Strong oxidizers, free radical initiators, inert gases

Hazardous decomposition Carbon oxides, nitrogen oxides (NOx)

products:

11. TOXICOLOGICAL INFORMATION

Component	Weight%	LD50/oral/rat	LC50/inhalation/rat
SILICON DIOXIDE, AMORPHOUS	<5	3160 mg/kg	
112945-52-5			

Local Effects

Skin Irritation: May cause skin irritation and/or dermatitis.

Eye Irritation: Irritating, but will not permanently injure eye tissue...

Inhalation: May cause irritation of respiratory tract. **Ingestion:** Irritating to mouth, throat and stomach.

Sensitization: None reasonably foreseeable. **Chronic toxicity:** None reasonably foreseeable

Specific Effects

Carcinogenic effects:

Mutagenic effects:

Reproductive toxicity:

Target Organ Effects:

None reasonably foreseeable.

None reasonably foreseeable by foreseeable.

None reasonably foreseeable by foreseeable.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste from Residues: According to the European Waste Catalogue, Waste Codes are not product

specific, but application specific. Waste codes should be assigned by the

user based on the application for which the product was used.

14. TRANSPORT INFORMATION

IATA

Proper Shipping Name: Not regulated Not applicable UN/ID No: Not applicable

IMDG

Proper shipping name: Not applicable Hazard Class: Not applicable UN/ID No: Not applicable

Marine Pollutant: None

ADR/RID

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s., (methacrylate ester)

Hazard Class: Class 9, PGIII UN/ID No: UN 3082

ADR/RID: Limited Quantity; LQ7

Product Name: 81668 STRIPPED THREAD REPAIR Item No: 390222D

PART 2

15. REGULATORY INFORMATION

This product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of Danger:

N - Dangerous for the environment

R -phrase(s):

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment **S -phrase(s)**:

S 2 - Keep out of the reach of children

S24/25 - Avoid contact with skin and eyes

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

16. OTHER INFORMATION

Risk Phrases mentioned in Section 2:

R15 - Contact with water liberates extremely flammable gases.

R17 - Spontaneously flammable in air.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Prepared By: Denise Boyd, Manager- Revision Date: January/30/2008

Environmental, Health & Safety

Company: Permatex. Inc. 10 Columbus Revision Number: 7

Blvd. Hartford, CT USA 06106

Telephone: 877-376-2839

Permatex Europe Unit 3, Express Park, Shipton Way, Northampton Road.

Shipton Way, Northampton Road, Rushden, Northamptonshire

NN10 6GK UK Ph: 0870 4589545

SAFETY DATA SHEET according to REACH regulation 1907/2006

1. IDENTIFICATION OF THE PREPARATION

Identification of the 81668 FORM-A-THREAD STRIPPED THREAD REPAIR PART 3

preparation:

Item No: 390505D Recommended use: Coating

2. HAZARDS IDENTIFICATION

Classification: None Most Important Hazards: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	EC Number	EU Classification
WATER	>75	231-791-2	None
7732-18-5			
POLYDIMETHYLSILOXANE	1-10	Not determined	None
63148-62-9			

4. FIRST-AID MEASURES

General advice: If you feel unwell, seek medical advice (show the label where possible).

Inhalation: None reasonably foreseeable.

Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In the case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

Ingestion: If swallowed, seek medical advice immediately and show this container or

label

Protection of first-aiders: Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide (CO2), Dry chemical, water spray, foam

Extinguishing media which None reasonably foreseeable.

must not be used for safety

reasons:

Special instructions forNo hazards to be specially mentioned.

protection and hygiene:

Special protective equipment Avoid contact with eyes.

for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: For additional information on processing see sections 7, 8 and 11 of this

safety data sheet.

Environmental Precautions: Do not flush into surface water or sanitary sewer system.

Cleanup: Absorb spill with inert material (e.g. dry sand or earth), then place in a

chemical waste container.

Product Name: 81668 FORM-A-THREAD STRIPPED <u>Item No:</u> 390505D

THREAD REPAIR PART 3

7. HANDLING AND STORAGE

Handling precautions: Avoid contact with the skin and the eyes. Wash hands before breaks and

immediately after handling the product.

Storage: Do not freeze.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH; TLV-TWA	German MAK; TWA	UK WEL; TWA	Finnish OEL; HTP
WATER	Not listed	Not listed	Not listed	Not listed
7732-18-5				
POLYDIMETHYLSILOXANE	Not listed	Not listed	Not listed	Not listed
63148-62-9				

Ventilation: Provide adequate ventilation . **Respiratory Protection:** Not required under normal use.

Skin: Neoprene or nitrile gloves recommended.

Eyes: Safety glasses

Hygiene Measures: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Odor:

PH:

Boiling point/range:

Blue liquid

NONE

9-11

100°C

Melting point: Not determined

Flash point: None

Risk of explosion: None reasonably foreseeable.

Vapor pressure: Not determined

Density: 1.0 **Solubility in water:** Soluble

Partition coefficient (n- Not determined

octanol/water):

Vapor density: <1 (Air = 1.0)

Evaporation Rate: <1 (butyl acetate = 1)

VOC Content(%): 0

10. STABILITY/REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Heat

Materials to avoid: None reasonably foreseeable

Hazardous decomposition Carbon oxides

products:

11. TOXICOLOGICAL INFORMATION

Component	Weight%	LD50/oral/rat	LC50/inhalation/rat
POLYDIMETHYLSILOXANE	1-10	>17 g/kg	
63148-62-9			

Local Effects

Skin Irritation: May cause skin irritation and/or dermatitis.

Eye Irritation: Irritating, but will not permanently injure eye tissue...

Inhalation:Not hazardous by inhalationIngestion:None reasonably foreseeableSensitization:None reasonably foreseeableChronic toxicity:None reasonably foreseeable

Product Name: 81668 FORM-A-THREAD STRIPPED

THREAD REPAIR PART 3

Specific Effects

Carcinogenic effects: May form formaldehyde at high temperatures.

Mutagenic effects: None reasonably foreseeable. Reproductive toxicity: None reasonably foreseeable

Target Organ Effects: Eyes, Skin

12. ECOLOGICAL INFORMATION

Ecotoxicity: No information available

13. DISPOSAL CONSIDERATIONS

Waste from Residues: According to the European Waste Catalogue, Waste Codes are not product

specific, but application specific. Waste codes should be assigned by the

Item No: 390505D

user based on the application for which the product was used.

14. TRANSPORT INFORMATION

IATA

Proper Shipping Name: Not regulated Not applicable UN/ID No: Not applicable

<u>IMDG</u>

Proper shipping name: Not applicable Hazard Class: Not applicable UN/ID No: Not applicable

Marine Pollutant: None

ADR/RID

Proper Shipping Name: Not regulated Hazard Class: Not applicable

UN/ID No: None

15. REGULATORY INFORMATION

This product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of Danger:

None

R -phrase(s):

None

S -phrase(s):

S 2 - Keep out of the reach of children S24/25 - Avoid contact with skin and eyes

16. OTHER INFORMATION

Risk Phrases mentioned in Section 2:

None

Prepared By: Denise Boyd, Manager- Revision Date: January/30/2008

Environmental, Health & Safety

Company: Permatex. Inc. 10 Columbus Revision Number: 5

Blvd. Hartford, CT USA 06106

Telephone: 877-376-2839