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 Kit MSDS
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Document id : 16-5640-4 Issue date : 20/07/2005
 Version : 1.00 Supersedes date : ---

 1 INFORMATION REGARDING KIT

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.

Tradename:

3M(TM) ESPE(TM) PERMADYNE PENTA(TM) H

3M Product ID:

70-2011-2089-9

Kit Components

16-2724-9 PERMADYNE HIGH, PERMADYNE FEST, PERMADYNE PENTA H BASE

16-5631-3 PERMADYNE PENTA H / PERMADYNE PENTA L CATALYST

The information on this 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.

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 MATERIAL SAFETY DATA SHEET
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Document id : 16-2724-9 Issue date : 6/27/2005
 Version : 6.00 Supersedes date : 5/13/2005

 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Tradename:

PERMADYNE HIGH, PERMADYNE FEST, PERMADYNE PENTA H BASE

3M Product ID:

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification	CAS number	Percentage
POLYETHER	---	55.0 - 65.0
DIATOMACEOUS EARTH	68855-54-9	5.0 - 20.0
Regulatory Lists: IARC(Group 1) - Category: SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)		
NTPCARCIN(Known human carcinogen) - Category: SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)		
FATTY ACIDS TRIGLYCERIDES	---	5.0 - 20.0
DIBENZYL TOLUENE	---	10.0 - 20.0
C.I. PIGMENT WHITE 5	1345-05-7	Approximately <2

3 HAZARDS IDENTIFICATION

Critical hazards:

None.

4 FIRST-AID MEASURES

Eye Contact:

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

Skin Contact:

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

Inhalation:

No need for first aid is anticipated.

Ingestion:

No need for first aid is anticipated.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

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

Hazardous Decomposition:

Irritant vapours or gases.

Fire-Fighting Procedures:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

Special Instructions:
Not applicable.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Observe precautions from other sections.

Methods for Cleaning up:
Ventilate the area with fresh air. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities.

7 HANDLING AND STORAGE

Incompatible Materials/Conditions:
Store away from heat. Store out of direct sunlight.

Precautions for Safe Handling:
Observe precautions from other sections.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Skin Protection:
Avoid prolonged or repeated skin contact. Gloves not normally required.

Respiratory Protection:
Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

Ingestion:
Do not ingest.

Recommended Ventilation:
Not applicable.

Exposure Limits:

DIATOMACEOUS EARTH (68855-54-9)
HSE WEL TWA: 1.2 mg/m³

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Different coloured paste with characteristic odour
pH:	Not determined
Boiling point/boiling range:	Not applicable
Melting point/melting range:	Not determined
Flash point:	Not applicable
Autoflammability:	Not determined
Vapour pressure:	Not applicable
Water Solubility:	Nil
Specific gravity:	1 -1.2
Vapour density:	Not applicable
Volatile organic compounds:	Not applicable
Evaporation rate:	Not applicable
Viscosity:	40000 -150000 centipoise
Percent Volatile:	Not applicable

10 STABILITY AND REACTIVITY

Conditions to Avoid:
Heat.

Materials to Avoid:
None known.

Hazardous Decomposition:
Stable. Hazardous polymerisation will not occur.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:
Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Effects from Skin Contact:
Single exposure may cause: Mild Skin Irritation:
signs/symptoms may include localised redness, swelling, and itching.

Effects from Inhalation:
No adverse health effects are expected.

Effects from Ingestion:
No health effects are expected.

12 ECOLOGICAL INFORMATION

Ecotoxicity Data:
Not determined.

13 DISPOSAL CONSIDERATIONS

Product after Use:
As a disposal alternative.

Special Instructions:
Incinerate in an industrial or commercial facility. Dispose of waste product in a facility permitted to accept chemical waste. Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

UN NUMBER:

UN number: This product is not restricted for transportation.

UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION:

Substance Identification Number:

Class:

Packing Group:

Proper Shipping Name:

ADR/RID CLASSIFICATION:

Class:

ADR classification:

ICAO/IATA CLASSIFICATION:

Class:

Sub-Risk:

Packing Group:

Proper Shipping Name:

15 REGULATORY INFORMATION

Disclosable Ingredients:
No ingredient required on label

Symbol(s):
None.

Risk Phrases:
None.

Safety Phrases:

Avoid contact with the skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water.

 16 OTHER INFORMATION

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. Carriage of Dangerous Goods by Road 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 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue.

Updated sections 7, 10, 12.

Intended Use of Product:

Dental impression kit

Limitations on Use of Product:

For use only by dental professionals

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 MATERIAL SAFETY DATA SHEET
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Document id : 16-5631-3 Issue date : 6/24/2005
 Version : 3.00 Supersedes date : 4/29/2005

 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Tradename:
 PERMADYNE PENTA H / PERMADYNE PENTA L CATALYST

3M Product ID:

 2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name and classification	CAS number	Percentage
CITRIC ESTER	77-90-7	35 - 45
SILANE TREATED SILICA	68909-20-6	20 - 30
SULFONIUM SALT	---	15 - 25
DIATOMACEOUS EARTH	68855-54-9	10 - 15
Regulatory Lists: IARC(Group 1) - Category: SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE) NTPCARCIN(Known human carcinogen) - Category: SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE)		
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5

 3 HAZARDS IDENTIFICATION

Critical hazards:
 None.

 4 FIRST-AID MEASURES

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

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

Inhalation:
 No need for first aid is anticipated.

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

Suitable Extinguishing Media:

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

Hazardous Decomposition:

Carbon Monoxide, Carbon Dioxide.

Fire-Fighting Procedures:

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, tunic and trousers (leggings), bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head. Water may be used to blanket the fire.

Special Instructions:

Not applicable.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Observe precautions from other sections.

Methods for Cleaning up:

Ventilate the area with fresh air. Collect as much of the spilled material as possible. Clean up residue. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

Precautions for Safe Storage:

Please observe precautions from other sections.

Incompatible Materials/Conditions:

Store away from heat. Store out of direct sunlight.

Precautions for Safe Handling:

Please observe precautions from other sections.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Skin Protection:

Gloves not normally required. Avoid prolonged or repeated skin contact. Avoid prolonged or repeated skin contact.

Respiratory Protection:

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

Ingestion:
Do not ingest.

Recommended Ventilation:
Not applicable.

Exposure Limits:

DIATOMACEOUS EARTH (68855-54-9)
HSE WEL TWA: 1.2 mg/m³

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Different Coloured Solid Paste with a characteristic odour.
Water Solubility:	Nil
Specific gravity:	1.1 -1.4 Water=1
Viscosity:	40000 -150000 centipoise
Percent Volatile:	Not determined

10 STABILITY AND REACTIVITY

Conditions to Avoid:
Heat

Materials to Avoid:
None known

Hazardous Decomposition:
Hazardous polymerisation will not occur. Stable.

11 TOXICOLOGICAL INFORMATION

Effects from Eye Contact:
Prolonged or repeated exposure may cause: Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Effects from Skin Contact:
Contact with the skin during product use is not expected to result in significant irritation.

Effects from Inhalation:
No adverse health effects are expected.

Effects from Ingestion:
Ingestion may cause: Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhoea and vomiting.

12 ECOLOGICAL INFORMATION

Ecotoxicity Data:
Not determined.

Ecofate Data:
Not determined.

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

Product after Use:
As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

Special Instructions:
Cure (harden, set, or react) the product according to product instructions. Since regulations vary, consult applicable regulations or authorities before disposal. Dispose of completely cured (or polymerised) wastes in a sanitary landfill.

14 TRANSPORT INFORMATION

UN NUMBER:

UN number: This product is not restricted for transportation.

UK ROAD/SEA FREIGHT (IMO) CLASSIFICATION:

Substance Identification Number:

Class:

Packing Group:

Proper Shipping Name:

ADR/RID CLASSIFICATION:

Class:

ADR classification:

ICAO/IATA CLASSIFICATION:

Class:

Sub-Risk:

Packing Group:

Proper Shipping Name:

15 REGULATORY INFORMATION

Disclosable Ingredients:

No ingredient required on product label.

Symbol(s):

None

Risk Phrases:

None

Safety Phrases:

Avoid contact with the skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water. Wear eye protection.

16 OTHER INFORMATION

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. Carriage of Dangerous Goods by Road 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 The Health and Safety at Work Act, 1974.

Reissue date/Reason for reissue.

Checked MSDS history.

Intended Use of Product:

Dental Impression Material

Limitations on Use of Product:

For use only by dental professionals

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