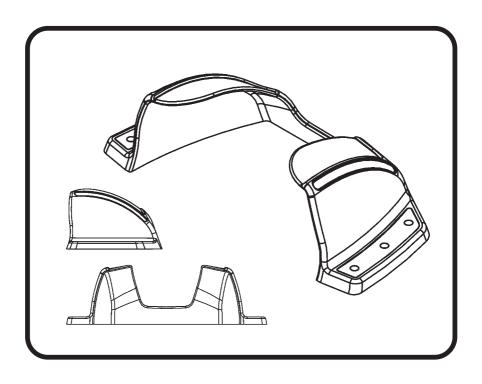


Οδηγίες συναρμολόγησης με εγχυτήρα ταινιών



Κατάλογος

1x

EVO 3 PIN Guard®



2x

3M VHΒ^{τΜ} καθαριστικό πακέτο επιφάνειας



1_X

3Μ 94 φιαλλίδιο εγχυτήρα



1x

Πίνακας πρότυπο board



Εξάγωνο Κλειδί Ασφαλείας (τοποθετημένο στο πάνω μέρος στο εσωτερικό του κουτιού)



1x

Εγχειρίδιο οδηγιών και υλική προδιαγραφή

Ολος ο εξοπλισμός ασφαλείας να παραχθεί άπο τον τεχνικό

ΠΡΟΣΟΧΗ! Μην τοποθετηθεί αν η θερμοκρασία της επιφάνειας είναι χαμηλότερη από 10 βαθμούς







4 BHMA

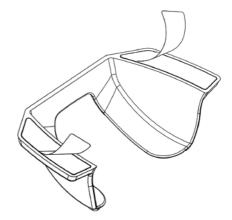
Ευθυγραμμήστε τον πίνακα πρότυπο



στην άκρη του πληκτρολογίου όπως παρουσιάζετε (μερικά μοντέλα ΑΤΜ χριάζετε να ρυθμιστούν, προς τα μπροστά ή προς τα πίσω για να έχουν σωστή εφαρμογή.. Σιγουρευτήτε ότι η περιοχή του PIN Guard® έχει πλήρως καθαρηστεί και είναι πλήρως καλυμμένη με τον εγχυτήρα

5 BHMA

Ξεκκολήστε την ταινία από τα "πόδια" του PIN Guard®

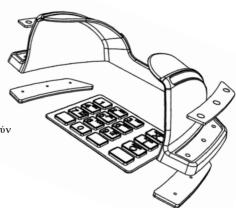


6 BHMA

Τοποθετήστε το PIN Guard® στο ΑΤΜ ώστε τα "πόδια"να είναι σε διάταξη με τον πίνακα πρότυπο όπως παρουσιάζετε.



Μόλις ευθυγραμμιστεί και τοποθετηθεί σωστά, αφαιρέστε τις βίδες για να φανούν τα πιάτα των βάσεων.



8 BHMA

Πιέστε το κάθε "πόδι" για 2 λεπτά τουλάχιστον!

Ετσι θα αφαιρεθούν αεροφυσαλίδες και θα βελτιώσει την προσκόληση. Αφήστε 5 λεπτά για να κολλήσει καλά



πακέτο 3M σκουπήστε την περιοχή γύρο από το PIN Guard® βεβαιωθήτε οποιαδοίποτε υπολείμματα του εγχυτήρα έχουν αφαιρεθεί Τοποθετήστε πίσω το PIN Guard® και σβήξτε τις βίδες.Εγκατάσταση ολοκληρώθηκε



3M Tape Primer 94

TECHNICAL DATA OCTOBER 2002

Product Description

3M™ Tape Primer 94 can be used to promote adhesion of 3M tapes to surfaces such polyethylene, polypropylene, ABS, PET/PBT blends, concrete, wood, glass, metal and painted metal surfaces.

Low VOC Alternates

	g/I VOC	Substrates
3M™ Scotch-Grip™	196	Powder paints
Plastic Adhesive 2262		
Thin 5 or 10 to 1 in acetone		
3M™ Scotch-Grip™	0	Neoprene,
Plastic Adhesive 1099		Santoprene,
Unthinned		EPDM

Note: Primer 94 contains greater than 250 g/l of volatile organic carbons (VOC). Less water, less exempt solvents. Please contact your local Air Quality Regulation to be sure this primer is compliant.

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Solids:	Approximately 6%
Colour:	Clear light yellow – clear dark
	orange
Flashpoint:	-4°F (-20°C) O.C.
Coverage:	600 sq. ft. (211 sq. m/l) per
	gallon
Net Weight:	750 grams per litre
Viscosity:	35+ 5cps

Application Techniques

Surface Preparation:

The bonding surface must be relatively clean and dry. Contaminated surfaces should be cleaned with a 50/50 Isopropyl Alcohol and water mixture. A clean lint-free cloth should be used.

Application:

Shake primer 94 well before using. Apply a thin uniform coating to the bonding surface using the minimum amount that will fully coat the surface. Allow primer 94 to dry thoroughly before applying tape. This is usually accomplished in 5 minutes at room temperature. Be sure the primed surface remains free from contaminants prior to applying the tape. Porous surfaces may require 2 applications of primer 94 for uniform coverage and good adhesion. Allow first application of primer to dry before applying the second coat. Primer 94 may be applied with brush or swab. It can also be applied with a pressurized flow gun, knurled roller or other similar type of

Clean Up:

application equipment.

Primer 94 can be removed with isopropyl alcohol. Vigorous scrubbing may be required.

Note: Carefully read and follow manufacturer's precautions and directions for use when handling cleaning solvents.

Shelf Life

One year from date of receipt by customer when the following conditions are observed:

- Keep 3M[™] Tape Primer 94 in the original container.
- Transfer only a small amount into a work vessel for use.
 - Keep original container tightly sealed to avoid solvent evaporation.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit www.3M.com/adhesives. Address correspondence to: 3M Industrial Adhesives and Tapes Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Limitation of Remedies and Liability

If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.



This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



Material Safety Data Sheet

3M Primer 94

 Document id:
 06-8243-5
 Issue date:
 30/01/2007

 Version:
 13.00
 Supersedes date:
 25/10/2005

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Tradename:

3M Primer 94

1.2 Intended Use of Product:

For use as a tape primer.

1.3 3M Product ID:

70-0160-5478-8, 70-0160-5476-2

1.4 Contact Address: 3M UK PLC

3M Ireland

3M Centre, Cain Road,

3M House, Adelphi Centre, Bracknell, Berkshire, RG12 8HT

Dun Laoghaire, Co. Dublin

1.5 Emergency Contact Number: +44 (0)1344 858 000

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name		
and classific ation Cyclohexane EU Number: EINECS 203-806-2 EU Classification: F: R11; Xn: R65; Xi: R38; R67; N: R50-53, EU Nota: 4, 6	CAS number 110-82-7	Percentage 45 - 50
Xylene EU Number: EINECS 215-535-7 EU Classification: R10; Xn: R20/21; Xi: R38 EU Nota: C	1330-20-7	25 - 35
Ethanol EU Number: EINECS 200-578-6 EU Classification: F: R11	64-17-5	5 - 10
Ethylbenzene EU Number: EINECS 202-849-4 EU Classification: F: R11; Xn: R20	100-41-4	3 - 7
2,5-Furandione, reaction products with polypropylene, chlorinated	68609-36-9	1 - 7
Acrylate polymer	Trade Secret	1 - 5
Ethyl acetate EU Number: EINECS 205-500-4 EU Classification: F: R11; Xi: R36; R66-67 EU Nota: 6	141-78-6	1 - 5
Epoxy resin (reaction product bisphenol A - epichlorhydrin, MW<700) EU Number: NLP 500-033-5 EU Classification: Xi: R36/38; R43; N: R51-53	25068-38-6	0.1 - 1

Ingredient name

and classific ationCAS numberPercentageToluene108-88-3< 0.5</td>

EU Number: EINECS 203-625-9 EU Classification: F: R11; Repr.Cat.3: R63; Xn: R48/20-65; Xi: R38; R67

EU Nota: 4, 6

Methanol 67-56-1 < 0.5

EU Number: EINECS 200-659-6 EU Classification: F: R11; T: R23/24/25-39/23/24/25

3 HAZARDS INDENTIFICATION

Risk Phrases:

R11 Highly Flammable. R38 Irritating to skin.

R20/21 Harmful by inhalation and in contact with skin. R65 Harmful: May cause lung damage if swallowed.

R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects

in the aquatic environment.

3M Contains epoxy resin

(reaction product bisphenol A-epichlorhydrin, MW<700).

3M May produce an allergic reaction.

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 Indestion:

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:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

5.4 Combustion Products from Fire:

Not determined.

5.5 Fire-Fighting Procedures:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment and a self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2 Methods for Cleaning up:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Contain spill. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. 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 metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep container tightly closed. Avoid inhalation of vapours, mists or spray. Avoid eye contact with vapours, mists, or spray. Vapours may ignite explosively. May cause flash fire. Prevent build-up of vapours - open all windows and doors. Maintain vapour concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapours may settle in low-lying areas. Keep away from heat, sparks, and open flame. Do not smoke or ignite matches, lighters, etc.

- Fire Prevention:

Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Extremely flammable liquid and vapour.

- Explosion Prevention:

Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

- Static Prevention:

Avoid static discharge.

7.2 Precautions for Safe Storage:

- Ventilation:

Keep container in a well-ventilated area.

- Incompatible Materials/Conditions:

Store away from heat.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Recommended Ventilation:

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use in a well-ventilated area. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapour, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 Exposure Limits:

Cyclohexane (110-82-7)

- HSE WEL TWA: 100 ppm; 350 mg/m3 - HSE WEL STEL: 300 ppm; 1050 mg/m3

Xylene (1330-20-7)

- HSE WEL TWA: 50 ppm; 220 mg/m3 (skin)

- HSE WEL STEL: 100 ppm; 441 mg/m3 (skin)

Ethanol (64-17-5)

- HSE WEL TWA: 1000 ppm; 1920 mg/m3

Ethylbenzene (100-41-4)

- HSE WEL TWA: 100 ppm; 441 mg/m3 (skin)

- HSE WEL STEL: 125 ppm; 552 mg/m3 (skin)

Ethyl acetate (141-78-6)

- HSE WEL TWA: 200 ppm

- HSE WEL STEL: 400 ppm

Toluene (108-88-3)

- HSE WEL TWA: 50 ppm; 191 mg/m3 (skin)

- HSE WEL STEL: 150 ppm; 574 mg/m3 (skin)

Methanol (67-56-1)

- HSE WEL TWA: 200 ppm; 266 mg/m3 (skin)

- HSE WEL STEL: 250 ppm; 333 mg/m3 (skin)

8.3 Exposure Controls:

8.3.1 Eye Protection:

Avoid eye contact with vapours, mists, or spray. 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:

The following glove material(s) are recommended:

Polyvinyl alcohol. Fluoroelastomer.

8.3.3 Skin Protection:

Not specified.

8.3.4 Respiratory Protection:

Avoid inhalation of vapours, mists or spray.

Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half face piece or full face airpurifying respirator with organic vapour cartridges.

8.3.5 Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep out of the reach of children.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour: Amber coloured liquid with a solvent odour.

- pH: ± 5.5

Boiling point/boiling range: 76.67 - 137.78 CMelting point/melting range: Not applicable

- Flash point: \pm -20.0 C (OC)

- Autoflammability: Not determined

- Flammable Limits - LEL: ± 1 %

- Flammable Limits - UEL: ±6%

- Vapour pressure: ± 9065 Pa (at 25 C)

- Water Solubility:

± 0.82 (Water=1) - Specific gravity:

- Vapour density: ± 0.0043 g/ml (at 100 C)

± 10 %

- Volatile organic compounds: $\pm 750 \, g/l$ - Viscosity: 30 - 40 mPa.s - Percent Volatile: ± 94 %

10 STABILITY AND REACTIVITY

10.1 Stability and Reactivity:

Stable. Hazardous polymerisation will not occur.

10.2 Conditions to Avoid:

Heat.

Sparks and/or flames.

10.3 Materials to Avoid:

None known.

10.4 Hazardous Decomposition:

> Carbon monoxide - During Combustion. Carbon dioxide - During Combustion.

> Hydrogen chloride - During Combustion.

11 TOXICOLOGICAL INFORMATION

11.1 Effects from Eve Contact:

> - Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

11.2 Effects from Skin Contact:

- May be absorbed through skin and cause target organ effects.
- Moderate Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Prolonged or repeated exposure may cause:
- Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness,

swelling, blistering, and itching.

- 11.3 Effects from Inhalation:
 - Maybe absorbed following inhalation and cause target organ effects.
 - Respiratory Tract Irritation: Signs/symptoms may include cough,

sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

- 11.4 Effects from Ingestion:
 - May be absorbed following ingestion and cause target organ effects.
 - Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.
 - Chemical (Aspiration) Pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal.
- 11.5 Other Effects and Information:
 - Central Nervous System (CNS) Depression:

Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Prolonged or repeated exposure may cause:

- Liver Effects:

Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

- Kidney/Bladder Effects:

Signs/symptoms may include changes in urine production, abdominal or lower

back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

- Carcinogenicity:

Contains a chemical or chemicals which can cause cancer. This product contains ethanol. In IARC published Monograph No. 44, entitled, 'Alcohol Drinking', the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

 Reproductive Effects:
 Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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

Not determined.

12.6 Ecofate Data:

Not determined.

12.7 Special statements for 2001/58/EC:

One or more components of this product have significant known or predicted environmental hazards, but a conservative assessment indicates a low environmental risk. Intended use and proper disposal are unlikely to cause the environmentally hazardous component(s) to enter the environment in quantities or by routes that could cause the adverse environmental impacts. Handling this product according to recommendations is important to minimise release to the environment. It is recommended that the environmental information included in this section be used to help determine appropriate handling of this product for your uses.

12.8 Other Effects and Information:

Product usages, or other lifecycle stages, are expected to release volatile organic compounds (VOCs) to the atmosphere. Regulations may restrict the release of VOCs because they contribute to the formation of ozone and smog. Regulatory definitions for VOC vary. Because of smog and other impacts, releases through evaporation or other means should be minimised to the extent possible.

13 DISPOSAL CONSIDERATIONS

13.1 Product as Sold:

Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility. Combustion products will include HCI. Facility must be capable of handling halogenated materials.

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:

- UN number: UN1866 - IMO Class: 3 - IMO Packing Group: Ш

- IMO Proper Shipping Name: Resin Solution

- ADR Class: F1 - ADR Classification: - ADR Packing Group:

- ADR Proper Shipping Name: Resin solution.

- IATA Class: 3 - IATA Packing Group:

- IATA Proper Shipping Name: Resin solution.

15 REGULATORY INFORMATION

Symbol(s):

Highly Flammable.

Xn Harmful.

Ν Dangerous to environment.

Risk Phrases:

R11 Highly Flammable. R38 Irritating to skin.

Harmful by inhalation and in contact with skin. R20/21 R65 Harmful: May cause lung damage if swallowed. R50/53 Very toxic to aquatic organisms. May cause

long-term adverse effects in the aquatic

environment.

ЗМ Contains epoxy resin

> (reaction product bisphenol A-epichlorhydrin, MW<700).

3M May produce an allergic reaction.

Safety Phrases:

S28B

S16 Keep away from sources of ignition -

No Smoking.

Use only in well ventilated areas. S51

S23A Do not breathe vapour.

S24/25 Avoid contact with the skin and eyes. S36/37 Wear suitable protective clothing and gloves.

In case of contact with eyes, rinse immediately S26

with plenty of water and seek medical advice. After contact with skin, wash immediately with

plenty of water.

S62 If swallowed, do not induce vomiting: Seek

medical advice immediately and show this

container or label.

S60 This material and/or its container must be

disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to

special instructions/safety data sheets.

Contains epoxy resins. See information supplied 3M

by manufacturer.

Disclosable Ingredients:

Cyclohexane;

Xylene.

Product Certifications:

EINECS.

16 OTHER INFORMATION

- 16.1 Complete list of risk phrases:
 - R10 Flammable.
 - R11 Highly Flammable.
 - R20 Harmful by inhalation.
 - R21 Harmful in contact with skin.
 - R23 Toxic by inhalation.
 - R24 Toxic in contact with skin
 - R25 Toxic if swallowed.
 - R36 Irritating to eyes.
 - R38 Irritating to skin.
 - R39 Danger of very serious irreversible effects.
 - R43 May cause sensitisation by skin contact.
 - R48 Danger of serious damage to health by prolonged exposure through inhalation.
 - R50 Very toxic to aquatic organisms.
 - R51 Toxic to aquatic organisms.
 - R53 May cause long-term adverse effects in the aquatic environment.
 - R63 Possible risk of harm to the unborn child.
 - R65 Harmful: May cause lung damage if swallowed.
 - R66 Repeated exposure may cause skin dryness or cracking.
 - R67 Vapours may cause drowsiness and dizziness.
 - 3M May produce an allergic reaction.
 - 3M Contains epoxy resin (reaction product bisphenol A- epichlorhydrin, MW<700).</p>
- 16.2 Limitations on Use of Product:

For industrial or professional use only.

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 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.

Material Safety Data Sheet

3M VHB Surface Cleaner

 Document id:
 18-6943-7
 Issue date
 : 12/04/2007

 Version:
 9.00
 upersedes date
 : 18/10/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Tradename:

3M VHB Surface Cleaner

1.2 Intended Use of Product:

To clean surfaces prior to bonding with VHB tapes.

1.3 3M Product ID:

DT-2729-9063-1

1.4 Contact Address:

3M UK PLC 3M Ireland

3M Centre, Cain Road,

3M House, Adelphi Centre,

Bracknell, Berkshire, RG12 8HT

Dun Laoghaire, Co. Dublin

1.5 Emergency Contact Number:

+44 (0)1344 858 000

2 COMPOSITION/INFORMATION ON INGREDIENTS

and classificationCAS numberPercentagePropan-2-ol67-63-090 - 100

EU Number: EINECS 200-661-7 EU Classification: F: R11; Xi: R36; R67

EU Nota: 6

Water 7732-18-5 < 10 EU

Number: EINECS 231-791-2 Ingredients on the European Detergents Directive 2004/648/CE:

The following ingredient information is provided per Regulation

EC No. 648/2004 on Detergents:

Ingredient CAS No. Concentration

Isopropyl alcohol 67-63-0 >10% Water 7732-18-5 1-10%.

3 HAZARDS IDENTIFICATION

Risk Phrases:

R11 Highly flammable.

R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

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:

Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

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:

Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

5.4 Combustion Products from Fire:

Not determined.

5.5 Fire-Fighting Procedures:

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment and a self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions:

Refer to other sections of this Material Safety Data Sheet for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2 Methods for Cleaning up:

Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam is recommended. Clean up residue with detergent and water. Collect the resulting residue containing solution. Place in an approved metal container. Seal the container. Dispose of collected material as soon as possible.

7 HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep container tightly closed.

Avoid inhalation of vapours, mists or spray. Avoid eye contact with vapours, mists, or spray. For industrial or professional use only. Do not breathe vapours. Avoid contact with oxidising agents.

- Fire Prevention: Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material.
- Explosion Prevention: Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.
- Static Prevention: Avoid static discharge.
- 7.2 Precautions for Safe Storage:
 - Incompatible Materials/Conditions: Store away from acids. Store away from heat.
 Store out of direct sunlight. Store away from oxidising agents.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Recommended Ventilation: Use with appropriate local exhaust ventilation.
- 8.2 Exposure Limits:

Propan-2-ol (67-63-0)

HSE WEL TWA: 999 mg/m3; 400 ppm HSE WEL STEL: 1250 mg/m3; 500 ppm

8.3 Exposure Controls:

- pH:

- 8.3.1 Eye Protection: Avoid eye contact with vapours, mists, or spray. 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: The following glove material(s) are recommended: Nitrile rubber.
- 8.3.3 Skin Protection: Avoid prolonged or repeated skin contact.
- 8.3.4 Respiratory Protection: Avoid inhalation of vapours, mists or spray. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: Half face piece or full face air-purifying respirator with organic vapour cartridges.
- 8.3.5 Ingestion: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance and Odour: Colourless low viscosity liquid with an

alcohol odour. Not applicable 82.4 °C

Boiling point/boiling range:
 Melting point/melting range:
 Not applicable

Flash point:
Autoflammability:
Flammable Limits - LEL:
Flammable Limits - UEL:
Vapour pressure:
Water Solubility:
12 °C
425 °C
2 % by volume
12.7 % by volume
Vot determined
Complete

- Specific gravity: 0.871 - 0.882 (Water=1)

- Vapour density:
 - Volatile organic compounds:
 - Percent Volatile:
 2.07 (Air=1)
 567
 100

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: Sparks and/or flames. Heat. Strong oxidising agents.
- 10.4 Hazardous Decomposition: Carbon monoxide During Combustion. Carbon dioxide 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: Contact with the skin during product use is not expected to result in significant irritation. Prolonged or repeated exposure may cause: Dermal Effects: Signs/symptoms may include localized redness, itching, drying and cracking of skin.
- 11.3 Effects from Inhalation: May be absorbed following inhalation and cause target organ effects. Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- 11.4 Effects from Ingestion: May be absorbed following ingestion and cause target organ effects. Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.
- 11.5 Other Effects and Information: Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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.
- 12.8 Other Effects and Information: Product usages, or other lifecycle stages, are expected to release volatile organic compounds (VOCs) to the atmosphere. Regulations may restrict the release of VOCs because they contribute to the formation of ozone and smog. Regulatory definitions for VOC vary. Because of smog and other impacts, releases through evaporation or other means should be minimised to the extent possible.

13 DISPOSAL CONSIDERATIONS

- 13.1 Product as Sold: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.
- 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: Reclaim solvent if feasible.
- 13.6 Special Instructions: Since regulations vary, consult applicable regulations or authorities before disposal.

14 TRANSPORT INFORMATION

- UN number: UN1219
- IMO Class: 3.0
- IMO Packing Group: II

- IMO Proper Shipping Name: losopropanol

- ADR Class:- ADR Classification:- ADR Packing Group:II

- ADR Proper Shipping Name: losopropanol

- IATA Class: 3.0

- IATA Packing Group:

- IATA Proper Shipping Name: Isopropanol

15 REGULATORY INFORMATION

Label Version Number: 06.00

Symbol(s):

Xi Irritant.

F Highly flammable.

Risk Phrases:

R11 Highly flammable. R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S14C Keep away from oxidising or reducing agents,

accelerators or combustibles.

S15 Keep away from heat.

S16 Keep away from sources of ignition

- No Smoking.

S26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

Use only in well ventilated areas.

S23A Do not breathe vapour.

S24/25 Avoid contact with the skin and eyes.

S28A After contact with skin, wash immediately with

plenty of soap and water.

Disclosable Ingredients: Propan-2-ol

16 OTHER INFORMATION

16.1 Complete list of risk phrases:

R11 Highly flammable. R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

16.2 Limitations on Use of Product: For industrial or professional use only.

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 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.