

設計驗證
工程課
2025-02-13
發行
紘耀科技開發股份有限公司

FOR YOU APPROVAL

承　　認　　書

•客戶名稱：鈺緯科技開發股份有限公司

•品名/產品描述：

(N0009)3N12D050040/ DOUBLE SIDE TAPE(3M 2110,W5*t1.1*L33m)

•規格/材質：　5mm*33M　/壓克力泡棉膠帶

•公　　差：裁切+/- 0.5mm

•日　　期：2025.02.11

•版　　本：　A

•客戶承認簽章

APPROVED BY	CHECK BY	PREPARED BY
設計驗證 工程課 2025-02-13 發行 鈺緯科技開發股份有限公司		

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廣東東莞廠：樺 豐 貿 易 有 限 公 司

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台灣樺島貿易有限公司

承認書目錄(3M#2110 TAPE)

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3M™ Solar Acrylic Foam Tape 2110

Product Description

3M™ Solar Acrylic Foam Tape 2110 features a general purpose adhesive on both sides of a firm, dark grey foam carrier. Typically used on various substrates, this tape has the added feature of high temperature resistance, making it often suitable for bonding prior to high temperature paint processing.

Key Benefits

- Pressure sensitive adhesive for quick application with immediate handling strength to speed assembly.
- Strength to replace liquid adhesives and mechanical fasteners in many applications.
- Neat application without the mess, ooze, and curing delay of liquid adhesives.
- Can typically tolerate differential movement in the shear plane up to 3 times its thickness.
- Bonds and seals simultaneously with durability to withstand vibration, impact, and weathering.
- Provides a clean, smooth appearance.

Slitting Tolerance

Standard slitting tolerance ±1/32 inch (±0.8 mm).

Core Size

Available on a 3 inch ID Core (76.2 mm).

UL Component Recognition

Tape 2110 is UL listed under UL 746C category QOQW2, file number MH17478.

Typical Physical Properties

Properties		Typical Values
Color		Dark Gray
Thickness	Inches (mm)	0.045 (1.1)
	Tolerance	± 10%
Adhesive Type		General Purpose Acrylic
Foam Type		Firm Closed Cell
Density lb/ft3 (kg/m3)		52 (840)
Release Liner Thickness	Type	PE Film
	Inches (mm)	0.005 (0.125)
	Color	Red

Dynamic Adhesion Performance	Unit	Value
90° Peel Adhesion	lb/in (N/100 mm)	18 (315)
Normal Tensile	lb/in² (kPa)	90 (620)
Dynamic Overlap Sheer	lb/in² (kPa)	65 (445)

90°Peel Adhesion – Based on ASTM D-3330 – To stainless steel, room temperature, jaw speed 12 in/min (305 mm/min). Average force to remove is measured.

Normal Tensile (T-Block Tensile) – ASTM D-897 – To aluminum, room temperature, 1 in² (6.45 cm²), jaw speed 2 in/min (50 mm/min.) Peak force to separate is measured.

Dynamic Overlap Shear – ASTM D-1002 – To stainless steel, room temperature, 1 in² (6.45 cm²), jaw speed 0.5 in/min (12.7 mm/min.) Peak force to separate is measured.

Static Shear		
Weight (grams) that 1/2 square inch will hold 10,000 minutes (7 days)	72°F (22°C)	1500
	150°F (66°C)	750
	200°F (93°C)	750
	250°F (121°C)	750
	350°F (177°C)	750

Temperature Tolerance	Unit	Value
Short Term (Minutes, Hours)	°F (°C)	450 (232)
Long Term (Days, Weeks)	°F (°C)	300 (149)

Static Shear – ASTM D3654 – To stainless steel, tested at various temperatures and gram loadings. 0.5 in² (3.22 cm²). Will hold listed weight for 10,000 minutes (approximately 7 days). Conversion: 1500 g/0.5 in² equals 6.6 lb/in²; 500 g/0.5 in² = 2.2 lb/in².

Short Term Temperature Tolerance – No change in room temperature dynamic shear properties following 4 hours conditioning at indicated temperature with 100 g/static load. (Represents minutes, hours in a process type temperature exposure).

Long Term Temperature Tolerance – Maximum temperature where tape supports at least 250 g load per 0.5 in² in static shear for 10,000 minutes. (Represents continuous exposure for days or weeks.



Note: All tapes should be thoroughly evaluated by the user under actual conditions with intended substrates to determine whether a specific tape is fit for a particular purpose and suitable for user's method of application, especially if expected use involves extreme environmental conditions.

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

Application Guidelines

Temperature, humidity, pressure and cleanliness can impact the adhesion characteristics.

- **Temperature:** As temperature increases, the initial adhesion will typically increase. Suggested application temperatures are 70°F to 100°F (21°C to 38°C). Minimum application temperature is 60°F (15°C).
- **Humidity:** The suggested humidity target for the application is below 90% R.H. SAFT that has a paper liner should be kept and applied below 70% R.H. There is concern that bringing cold tape or substrates into a warm humid environment can also cause condensation, which impact adhesion.
- **Pressure:** Increasing pressure can improve the adhesive to surface contact, which can increase the adhesion. Suggested pressurization is 30 psi. Minimum suggested pressurization is 15 psi at bond interface.
- **Cleanliness:** The cleanliness of the surface can also impact adhesion. Typically a thorough cleaning with a 50:50 mixture of isopropyl alcohol and water is sufficient.

The impact of these variables is very dependent on the specific substrate. Going outside of these ranges can have positive or negative impacts. Performance is dependent on the substrate.

See Application Techniques document for additional information.

Shelf Life

24 months from date of manufacture when stored at 40°F to 100°F (4°C to 38°C) and 0 to 95% relative humidity. The optimum storage conditions are 72°F (22°C) and 50% relative humidity.

Performance of tapes is not projected to change even after shelf life expires; however, 3M does suggest that 3M™ Solar Acrylic Foam Tapes are used prior to the shelf life date whenever possible.

Additional Typical Characteristics

Properties	Typical Values	
Thermal Conductivity – K-value	**Unit**	**Value**
BTU in	hr ft^2 °F (w/mK)	0.77 (0.11)

R-Value = thickness/K-value (When units of K-value are BTU-in/hr ft^2 °F and thickness is given in inches.)

Resistivity (ASTM D257)	**Unit**	**Value**
Volume Resistivity	(in ohm-cm)	1.4×10^{15}
Surface Resistance	(in ohms/square)	$>10^{16}$

United States
3M Renewable Energy Division
800 755 2654

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49 2131 144450

Denmark
45 43 480100

Spain
34 91 3216000

France
33 1 30316161

United Kingdom
44 1344 858000

Italy
39 02 70351

Singapore
65 6450 8888

China
86 21 62753535

Korea
82 2 3771 4043

India
91 80 22231414

Canada
800 364 3577

Brazil
0800 13 23 33

Mexico
52 55 52702250

Taiwan
886 933 896752

Japan
81 3 3709 8283

Malaysia
603 78062888

Other Areas
800 755 2654

For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-755-2654 or visit us at www.3M.com/solar.

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3M™ Solar Acrylic Foam Tape 2110

Product Identification Numbers
80-6116-2648-4, 80-6116-2684-9, 80-6116-2700-3, 80-6116-2733-4, 80-6116-2734-2
7100181713, 7100181712, 7100179320, 7100181743, 7100161298

3M
Electrical Markets Division
3M Center, St. Paul, MN 55144-1000, USA
1-888-3M HELPS (1-888-364-3577)

RDSs are available at www.3M.com

Regulations and Industry Standards

SDS (US OSHA)
This product is an article and therefore is not subject to the requirements of the US Occupational Safety and Health Administration's (OSHA) Hazardous Communications Standard 29 CFR 1910.1200(b)(6)(v) to provide a Safety Data Sheet (SDS).
China RoHS
This product or part does not exceed the maximum concentration values (MCVs) in China RoHS GB/T 26572-2011 (Requirements of Concentration limits for certain restricted substances in electrical and electronic products), which means that each of the homogeneous materials within this product is below the following MCVs: (a) 0.1% (by weight) for lead and its compounds, mercury and its compounds, hexavalent chromium and its compounds, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium and its compounds.
CONEG
This product complies with the US CONEG (Coalition of Northeastern Governors) Model Toxics in Packaging Legislation as there is no intentionally added lead, cadmium, hexavalent chromium or mercury, and the sum total concentration of these substances in the product does not exceed 100 ppm by weight.
Conflict Minerals
Conflict Minerals, which the U.S. Securities and Exchange Commission ("SEC") has defined as gold, columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives (tin, tantalum, or tungsten), are not contained in or are not "necessary to the functionality or necessary to the production" of the above-listed product, as the term "necessary to the functionality or the production" is defined under the SEC's Conflict Minerals Rule. 77 Fed. Reg. 56274 (Sept. 12, 2012).
CPSIA 2008
A Certificate of General Conformity per the US Consumer Product Safety Act, 15 U.S.C. § 2063 (a)(1), as revised by section

102 of the 2008 US Consumer Product Safety Improvement Act, is not required for the requested product.

EU REACH

This product is an article, without intended release of a chemical substance, under the Regulation No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (refer to REACH, Article 3(3)). It is not a chemical preparation. Therefore, it is not subject to the (pre)-registration or the registration process. It does not require a safety data sheet.

EU REACH

This product, including any article that the product is composed of, does not contain at greater than 0.1% by weight a Substance of Very High Concern (SVHC) substance identified according to Article 59 of REACH. This declaration reflects the substances on the candidate SVHC list, effective January 2024.

EU RoHS

This product does not exceed the maximum concentration values (MCVs) set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as stated in Annex II to that directive. This means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

EU RoHS Phthalates

This product does not exceed the maximum concentration values (MCVs) for phthalates set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as amended by EU 2015/863, which applies to finished EEE after July 22, 2019 for Category 1-7, 10-11 products and after July 22, 2021 for Category 8 and 9 products. This means that each of the homogeneous materials within this product does not exceed the MCV of 0.1% (by weight) for each of the following phthalates: DEHP, BBP, DBP, and DIBP.

Fluorinated Greenhouse Gas

A Fluorinated Greenhouse Gas (or F-Gas) listed under Annex I and II of Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 is not intentionally added to the product.

Halal

This product has not been reviewed. However, this product does not contain a material of animal or human origin in the manufacturing process.

IEC62474

IEC62474 substances are not intentionally added to this product. This declaration reflects the substances on the list as of the date of this certificate.

IPC1752A

Substances listed in IPC1752A are not intentionally added to this product. This declaration reflects the substances on the list as of the date of this certificate.

Kosher

This product has not been reviewed. However, this product does not contain a material of animal or human origin in the manufacturing process.

Lacey Act

As a company committed to compliance and sustainability, a standard part of 3M's supplier practices and arrangements is to require its suppliers to comply with all applicable laws affecting the manufacture of products for 3M. This includes the U.S. Animal and Plant Health Inspection Service (APHIS) Lacey Act amendments of May 22, 2008. This product does not intentionally contain plant based material and as such is exempt from the Lacey Act.

Stockholm Agreement

This product does not contain Persistent Organic Pollutants (POPs) at or above applicable thresholds per Annexes A, B, and C of the Stockholm Convention, May 2004 and subsequent amendments.

Sustainability Advantage: Recycled content

This product does not contain recycled content.

Sustainability Advantage: Solventless or water-based manufacturing process

This product is made using a solventless or water-based manufacturing process.

Sustainability Advantage: Legal Harvesting

Products and product packaging supplied to 3M Company must comply with laws related to product content, including laws that prohibit use of illegally harvested timber or plant materials. Laws regarding timber and timber products, such as the United States Lacey Act, the European Union Timber Regulation, and the Australia Illegal Logging Prohibition Act, restrict the sales and imports of illegally harvested timber or products derived from such timber (including paper or paper pulp). For more information, refer to
http://solutions.3m.com/wps/portal/3M/en_US/SD/Supplier/Requirements/SREE/LegalHarvestingLaws/

Sustainability and 3M
Go to www.3M.com/sustainability to learn about 3M's programs. 3M is a signatory of the United Nations Global Compact (UNGC).
Sustainability and 3M's Code of Conduct
Go to www.3M.com/businessconduct
Sustainability and Manufacturing Environmental Standards
All of 3M's manufacturing operations worldwide are required to have an Environmental Management System (EMS) in place. Most of these facilities are ISO 14001 registered through a third party. As of May 1, 2013, 3M held 147 ISO certifications worldwide including 14 country-wide or multi-site certificates, 3 RC 14001 certificates (Responsible Care®) and 1 RCMS certificate (Responsible Care® Management System).
TSCA Section 6
This product is not known to contain 2,4,6-Tri-tert-butylphenol (CAS 732-26-3).
TSCA Section 6
This product is not known to contain Decabromodiphenyl Ether (Deca-BDE) (CAS 1163-19-5).
TSCA Section 6
This product is not known to contain Hexachlorobutadiene (HCBD) (CAS 87-68-3).
TSCA Section 6
This product is not known to contain Pentachlorothiophenol (PCTP) (CAS 133-49-3).
TSCA Section 6
This product is not known to contain Phenol, isopropylated phosphate (3:1) (PIP (3:1)) (CAS 68937-41-7).
US FDA Indirect Food Additive
This product has not been reviewed for the United States Food and Drug Administration (Code of Federal Regulations) 21 CFR Regulations. Please contact 1-800-362-3550.

Chemicals and/or Compounds of Interest

4,4'-Methylenebis(2,6-Diethylaniline) (CAS 13680-35-8) : Not known to contain.
Acrylamide (CAS 79-06-1) : Not known to contain.
Alkylphenol (AP) : Not known to contain.
Alkylphenolethoxylates (APE) : Not known to contain.
Antimony and (Sb) Compounds : Not known to contain.
Aromatic Amines : Not known to contain.
Arsenic and (As) Compounds : Not known to contain.
Asbestos : Not known to contain.
Azocolorants and Azodyes : Not known to contain.
Benzenamine, N-Phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST) (CAS 68921-45-9) : Not known to contain.
Beryllium and (Be) Compounds : Not known to contain.
Bismuth and (Bi) Compounds : Not known to contain.
Bisphenol A (BPA) (CAS 80-05-7) : Not known to contain.
Butyl Benzyl Phthalate (BBP) (CAS 85-68-7) : Not known to contain.
Cadmium and (Cd) Compounds : Not known to contain.
Chlorinated Paraffins, Short Chain : Not known to contain.
Chlorinated Polyethylene : Not known to contain.
Chloroprene (Neoprene) : Not known to contain.
Chlorosulfonated Polyethylene : Not known to contain.
Chromium and (Cr) Compounds : Not known to contain.
Creosote : Not known to contain.
Crystalline Silica : Not known to contain.
Decabromodiphenyl Ether (Deca-BDE) (CAS 1163-19-5) : Not known to contain.
Di(2-Ethylhexyl) Phthalate (DEHP) (CAS 117-81-7) : Not known to contain.
Di(Methoxyethyl) Phthalate (DMEP) (CAS 117-82-8) : Not known to contain.
Dibutyl Phthalate (DBP) (CAS 84-74-2) : Not known to contain.
Dibutyl Tin Compounds : Not known to contain.
Diisobutyl Phthalate (DIBP) (CAS 84-69-5) : Not known to contain.

Diisodecyl Phthalate (DIDP) : Not known to contain.
Diisononyl Phthalate (DINP) : Not known to contain.
Dimethyl Fumarate (DMF) (CAS 624-49-7) : Not known to contain.
Dimethylacetamide (CAS 127-19-5) : Not known to contain.
Di-n-Octyl Phthalate (DNOP) (CAS 117-84-0) : Not known to contain.
Dioxins and Furans : Not known to contain.
Dyes : Not known to contain.
Epoxy Compounds : Not known to contain.
Fiberglass : Not known to contain.
Flame Retardants (not PBB or PBDE) : Not known to contain.
Flavorings : Not known to contain.
Formaldehyde (CAS 50-00-0) : Not known to contain.
Genetically Modified Organisms (GMOs) : Not known to contain.
Gluten : Not known to contain.
Halogenated Compounds : Bromine, chlorine, fluorine, iodine or chemical compounds containing them are not intentionally added.
Halogenated Flame Retardants : Not known to contain.
Hexabromo Cyclo-Dodecane (HBCD) : Not known to contain.
Hexavalent Chromium and (Cr+6) Compounds : Not known to contain.
Iron and (Fe) Compounds : Not known to contain.
Lead and (Pb) Compounds : Not known to contain.
Materials of Human or Animal Origin : Not known to contain.
Melamine (CAS 108-78-1) : Not known to contain.
Mercury and (Hg) Compounds : Not known to contain.
Methylene Chloride (CAS 75-09-2) : Not known to contain.
Musk Xylene (CAS 81-15-2) : Not known to contain.
Natural Rubber Latex : Not known to contain.
Nickel and (Ni) Compounds : Not known to contain.
N-Nitrosamines : Not known to contain.
Nonylphenol (NP) : Not known to contain.
Nonylphenol Ethoxylates (NPE) : Not known to contain.
Nuts : Not known to contain.
Organochlorine Pesticides : Not known to contain.
Organophosphate Pesticides : Not known to contain.
Organotin Compounds : Not known to contain.
Ozone Depleting Chemicals (ODCs) : Not known to contain.
Pentachlorophenol (87-86-5) : Not known to contain.
Petrochemical Fertilizers : Not known to contain.
Phenol (CAS 108-95-2) : Not known to contain.
Phosphorus and (P) Compounds : Not known to contain.
Phthalates : Not known to contain.
Polybrominated Biphenyls (PBB) : Not known to contain.
Polybrominated Diphenylethers (PBDE) : Not known to contain.
Polychlorinated Biphenyls (PCBs) : Not known to contain.
Polychlorinated Naphthalenes (PCNs) (>3 Chlorine Atoms) : Not known to contain.
Polycyclic Aromatic Hydrocarbons (PAHs) : Not known to contain.
Polyvinyl Chloride (PVC) : Not known to contain.
Potassium and (K) Compounds : Not known to contain.
Radioactive Substance : Not known to contain.
Selenium and (Se) Compounds : Not known to contain.
Silicone : Not known to contain.
Sulfur and (S) Compounds : Not known to contain.
Tetrabromobisphenol A (TBBA) (CAS 79-94-7) : Not known to contain.
Tin and (Sn) Compounds : Not known to contain.
Tributyl Tin Compounds : Not known to contain.

Triphenyl Tin Compounds : Not known to contain.
Urea-Formaldehyde (UF) : Not known to contain.

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS refers to a broad range of thousands of materials with varying properties and characteristics, which may include high resistance to oil, water, temperature, chemicals, and fire, which makes certain PFAS critical to the functioning of many modern products.

Chlorofluorocarbons (CFCs) : Not intentionally added.
Hydrochlorofluorocarbons (HCFCs) : Not intentionally added.
Perfluorooctanesulfonic Acid (PFOS) (CAS 1763-23-1) : Not intentionally added.
Perfluorooctanoic Acid (PFOA) (CAS 335-67-1) : Not intentionally added.

Definitions

Note: all Definitions take Disclaimers into account and apply to the "Chemicals and/or Compounds of Interest" and/or "Per and poly-fluoroalkyl Substances (PFAS)" sections only

Terms	Definitions
Contains*	Present based on composition information disclosed by 3M suppliers, analytical testing, or both.
Not known to contain*	1. Analytical measurement for presence is not currently available; 2. If measurement is possible, a) The material has not been identified or disclosed to 3M and b) The material has not been specifically quantified or detected; OR c) Based on information from raw material suppliers, possible presence as an impurity or by-product at or below regulatory thresholds (e.g., 0.1 or 0.01 %)
Intentionally added**	Desired in the final product to provide a specific characteristic, appearance, or quality and/or to perform a specific function.
Not intentionally added**	By-product(s), impurity(ies) and/or unintended artifact(s) resulting from the formulation and/or manufacture of a material.
By-product***	A chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.
Impurity***	A chemical substance which is unintentionally present with another chemical substance (e.g., residuals, catalysts, process solvents).

**Terms apply to the Chemicals and/or Compounds of Interest Section only (if section is present)*
***Terms apply to the PFAS Section only (if section is present)*
****Terms apply to both the Chemicals and/or Compounds of Interest and PFAS Sections (if section(s) are present)*

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Document Group:	27-0041-7	**Version Number:**	3.01
Issue Date:	04/30/21	**Supercedes Date:**	02/28/18

SECTION 1: Identification

1.1. Product identifier
3M™ Solar Acrylic Foam Tape 2110

Product Identification Numbers
80-6116-2648-4, 80-6116-2684-9, 80-6116-2700-3, 80-6116-2733-4, 80-6116-2734-2
7100161298, 7100181743, 7100179320, 7100181712, 7100181713

1.2. Recommended use and restrictions on use

Recommended use
Tape

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Electrical Markets Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Acrylic Foam Adhesive	Trade Secret*	100

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
No need for first aid is anticipated.

Skin Contact:
No need for first aid is anticipated.

Eye Contact:
No need for first aid is anticipated.

If Swallowed:
No need for first aid is anticipated.

SECTION 5: Fire-fighting measures

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Not applicable.

6.2. Environmental precautions
Not applicable.

6.3. Methods and material for containment and cleaning up
Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2. Conditions for safe storage including any incompatibilities
No special storage requirements.

SECTION 8: Exposure controls/personal protection

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. No engineering controls or personal protective equipment (PPE) are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid
Color	Dark Gray
Odor	Slight Acrylate
Odor threshold	*Not Applicable*
pH	*Not Applicable*
Melting point	*No Data Available*
Boiling Point	*Not Applicable*
Flash Point	*Not Applicable*
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*Not Applicable*
Vapor Density	*Not Applicable*
Density	*No Data Available*
Specific Gravity	*Not Applicable*
Solubility in Water	Nil
Solubility- non-water	*Not Applicable*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*Not Applicable*
Decomposition temperature	*Not Applicable*
Viscosity	*Not Applicable*
Percent volatile	*Not Applicable*

SECTION 10: Stability and reactivity

This material is considered to be non reactive under normal use conditions.

SECTION 11: Toxicological information

Inhalation:
No health effects are expected

Skin Contact:
No health effects are expected

Eye Contact:
No health effects are expected

Ingestion:
No health effects are expected

Additional Information:
This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

SECTION 12: Ecological information

This article is expected to present a low environmental risk either because use and disposal are unlikely to result in a significant release of components to the environment or because those components that may be released are expected to have insignificant environmental impact.

SECTION 13: Disposal considerations

Dispose of contents/container in accordance with the local/regional/national/international regulations.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

Chemical Inventories
This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory requirements.

SECTION 16: Other information

NFPA Hazard Classification
Health: 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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