Safety Data Sheet

This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

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This safety data sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS is not required for this product by the SS586 Specification for Hazard communication for hazardous chemicals and dangerous goods because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: Identification

1.1. Product identifier
Scotch® Vinyl Electrical Color Coding Tape 35 (Blue, Brown, Gray, Green, Orange, Pink, Red, Violet, White, Yellow)

1.2. Recommended use and restrictions on use

Recommended use
Reinsulating and colour-coding electrical wiring

1.3. Supplier's details
Address: 3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059
Telephone: +65 6450 8888
Website: www.3m.com.sg

1.4. Emergency telephone number
+65 6591 6601 (8.15am - 5.00pm, Monday - Friday)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
This product is not classified as hazardous per GHS criteria as implemented by Singapore Standard SS586: 2022.

2.2. Label elements
SIGNAL WORD
Not applicable.

Symbols
Not applicable

Pictograms

Not applicable

2.3. Other hazards
None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Mixture	> 97
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	< 3

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
No need for first aid is anticipated. If symptoms develop, remove the affected person to fresh air. Get medical attention.

Skin contact
No need for first aid is anticipated.

Eye contact
If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

If swallowed
Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Chloride	During combustion.
Oxides of antimony.	During combustion.

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store away from heat. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
Singapore PELs : Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Skin/hand protection
No protective gloves required.

Respiratory protection

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Roll of Tape.
Color	Multicolor
Odor	Mild Polyvinyl chloride, Mild Solvent
Odour threshold	*Not applicable.*
pH	*Not applicable.*
Melting point/Freezing point	*No data available.*
Boiling point/Initial boiling point/Boiling range	*Not applicable.*
Flash point	*No data available.*
Evaporation rate	*Not applicable.*
Flammability	Not applicable.
Flammable Limits(LEL)	*Not applicable.*
Flammable Limits(UEL)	*Not applicable.*
Vapour pressure	*Not applicable.*
Relative Vapor Density	*Not applicable.*
Relative density	1.22
Water solubility	[*Details:*CONDITIONS: NIL]*No data available.*
Solubility- non-water	*Not applicable.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*
Decomposition temperature	*Not applicable.*
Kinematic Viscosity	*Not applicable.*
Volatile organic compounds (VOC)	*Not applicable.*
VOC less H2O & exempt solvents	*No data available.*
Molecular weight	*No data available.*

Particle Characteristics	*Not applicable.*

SECTION 10: Stability and reactivity

10.1 Reactivity
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability
Stable.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur.

10.4 Conditions to avoid
Not determined

10.5 Incompatible materials
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	**Condition**
Hydrocarbons.	At elevated temperatures. - >90 C

Refer to section 5.2 for hazardous decomposition products during combustion.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation
No health effects are expected.

Skin contact
No health effects are expected.

Eye contact
No health effects are expected.

Ingestion
Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

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.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Ingestion		LD50 estimated to be > 5,000 mg/kg
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Dermal	Rabbit	LD50 > 3,160 mg/kg
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Professional judgement	No significant irritation
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Rabbit	Mild irritant

Sensitization:

Skin Sensitisation

Name	Species	Value
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Human and animal	Not classified

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	In Vitro	Not mutagenic
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Not specified.	Rat	Some positive data exist, but the data are not sufficient for classification
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Not specified.	Not classified for development	Mouse	NOAEL Not available	during gestation
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Dermal	blood | liver | kidney and/or bladder	Not classified	Rabbit	NOAEL 2,425 mg/kg/day	6 weeks
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL not available	13 weeks
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 733 mg/kg/day	2 years
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	Ingestion	nervous system | respiratory system	Not classified	Rat	NOAEL 733 mg/kg/day	2 years

Aspiration Hazard
For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Mixture	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Fathead minnow	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	>100 mg/l
1,2-Benzenedicarboxyl	68515-48-0	Midge	Experimental	10 days	LC50	>2,680 mg/kg (Dry Weight)

ic acid, di-C8-10-branched alkyl esters, C9-rich						
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Mysid Shrimp	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Sheepshead Minnow	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Green algae	Experimental	72 hours	No tox obs at lmt of water sol	100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Sediment organism	Experimental	35 days	NOEC	858 mg/kg (Dry Weight)
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Water flea	Experimental	21 days	No tox obs at lmt of water sol	100 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Activated sludge	Experimental	30 minutes	EC50	>83.9 mg/l
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Lettuce	Experimental	5 days	EC50	>8,062 mg/kg (Dry Weight)
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Lettuce	Experimental	28 days	NOEC	1,387 mg/kg (Dry Weight)
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Redworm	Experimental	14 days	LC50	>7,270 mg/kg (Dry Weight)
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Redworm	Experimental	56 days	NOEC	982.4 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Poly(Vinyl Chloride) Tape	Mixture	Data not available-	N/A	N/A	N/A	N/A

with Rubber-Based Adhesive		insufficient				
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Experimental Biodegradation	28 days	BOD	70.5 %BOD/ThOD	OECD 301F - Manometric respirometry

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Poly(Vinyl Chloride) Tape with Rubber-Based Adhesive	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Estimated BCF - Fish	14 days	Bioaccumulation factor	<3	
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	68515-48-0	Analogous Compound Bioconcentration		Log Kow	8.8	EC A.8 Partition Coefficient

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available.

SECTION 13: Disposal considerations

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials.

SECTION 14: Transport Information

International Regulations

UN No.: None assigned
UN Proper shipping name: None assigned

Transportation Class (IMO): None assigned
Transportation Class (IATA): None assigned
Other Dangerous Goods Descriptions (IMO): None assigned
Other Dangerous Goods Descriptions (IATA): None assigned
Packing Group: None assigned
Marine pollutant: None assigned

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status
Contact 3M for more information.

This product may contain component(s) that are regulated by the following:
Fire Safety (Petroleum and Flammable Materials) Regulations: This product is subject to the requirements in the Regulations
Environmental Protection and Management (Hazardous Substances) Regulations: This product is subject to the requirements in the Regulations

SECTION 16: Other information

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

3M Singapore SDSs are available at www.3m.com.sg