

Safety Data Sheet

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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 Industrial Safety and Health Law, 39-1 and 41 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.

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This Safety Data Sheet has been prepared in accordance with the Industrial Safety and Health Law, 39-1 and 41

SECTION 1: Identification

1.1. Product identifier

3M(TM) Thermally Conductive Interface Pad 5583S

1.2. Recommended use and restrictions on use

Recommended use

Thermally conductive pad, Industrial use

1.3. Supplier's details

Company: 3M Korea

ADDRESS: 19F, 82, Uisadang-daero, Yeongdeungpo-gu, Seoul, 150-705, Korea

Telephone: 82-2-3771-4114 **Website:** www.3m.com/kr **Emergency** 82-80-033-4114

Telephone:

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

This product is considered to be an article and is exempt from GHS classification.

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	Common Name	C.A.S. No.	% by Wt
Silicone Elastomer with Thermally	Not Available	Trade Secret	100
Conductive Fillers			

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye Contact:

No need for first aid is anticipated.

Skin Contact:

No need for first aid is anticipated.

Inhalation:

No need for first aid is anticipated.

If Swallowed:

No need for first aid is anticipated.

4.2. Most important symptoms and effects, both acute and delayed

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.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Engineering controls

Not applicable.

8.3. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Hand Protection

No chemical protective gloves are required.

Body protection

None 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

Appearance/Odor White with blue PET film

Odor threshold Not Applicable Not Applicable pН Melting point/Freezing point Not Applicable Boiling point/Initial boiling point/Boiling range Not Applicable **Flash Point** Not Applicable **Evaporation rate** Not Applicable Not Classified Flammability (solid, gas) Not Applicable Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) **Vapor Pressure** Not Applicable Not Applicable **Vapor Density**

DensityNo Data Available**Relative Density**No Data Available

Water solubility Nil

Solubility- non-waterNot ApplicableAutoignition temperatureNot ApplicableDecomposition temperatureNot ApplicableMolecular weightNot Applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

Carbon monoxide Oxidation, heat or reaction
Carbon dioxide Oxidation, heat or reaction

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 labeling, 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:

No health effects are expected.

Additional Information:

This product, when used under reasonable conditions and in accordance with the 3M 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
Silicone Elastomer with Thermally Conductive Fillers			Data not available or insufficient for classification

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

Serious Eye Damage/Irritation

Name	Species	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

Skin Sensitization

Name	Species	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

Photosensitization

Name	Species	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

Respiratory Sensitization

Name	Species	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Overall product		Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification

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Carcinogenicity

Name	Route	Species	Value
Overall product			Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers			Data not available or insufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Reproductive und/or Bevelopmental Effects							
Name	Route	Value	Species	Test Result	Exposure Duration		
Overall product		Data not available or insufficient for classification					
Silicone Elastomer with Thermally Conductive Fillers		Data not available or insufficient for classification					

Lactation

Name	Route	Species	Value
Overall product			Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers			Data not available or insufficient for classification

Target Organ(s)

Specific Target Organ Toxicity - single exposure

specific range: Organ rowerty - single exposure								
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration		
Overall product			Data not available or insufficient for classification			0		
Silicone Elastomer with Thermally Conductive Fillers			Data not available or insufficient for classification			0		

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Overall product			Data not available or insufficient for classification			0
Silicone Elastomer with Thermally Conductive Fillers			Data not available or insufficient for classification			0

Aspiration Hazard

Name	Value
Overall product	Data not available or insufficient for classification
Silicone Elastomer with Thermally Conductive Fillers	Data not available or insufficient 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 labeling, 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.

Material	Organism	Type	Exposure	Test Endpoint	Test Result
Overall product	N/A	Data not available	N/A	N/A	N/A
		or insufficient for			
		classification			

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Silicone	Trade Secret	N/A	Data not	N/A	N/A	N/A
Elastomer with			available or			
Thermally			insufficient for			
Conductive			classification			
Fillers						

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Overall product	None	Data not	N/A	N/A	N/A	N/A
		available or				
		insufficient for				
		classification				
Silicone	Trade Secret	Data not	N/A	N/A	N/A	N/A
Elastomer with		available or				
Thermally		insufficient for				
Conductive		classification				
Fillers						

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Overall product	None	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silicone Elastomer with Thermally Conductive Fillers	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

Material	CAS No.	Ozone Depletion Potential	Global Warming Potential
Overall product	None	Data not available or	Data not available or insufficient
		insufficient for	for classification

		classification	
Silicone Elastomer with	Trade Secret	Data not available or	Data not available or insufficient
Thermally Conductive		insufficient for	for classification
Fillers		classification	

SECTION 13: Disposal considerations

13.1. Disposal methods

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

13.2. Disposal Considerations (including disposal method for contaminated drums, barrels, or other packagings):

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transport Information

International Regulations

UN No.: Not applicable

UN Proper shipping name: Not applicable **Transportation Class (IMO):** Not applicable **Transportation Class (IATA):** Not applicable

Packing Group: Not applicable Marine pollutant: Not applicable

User informed transportation or shipping and required safety plan: Not applicable

SECTION 15: Regulatory information

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

Global inventory status

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements. Contact 3M for more information. This product is an article as defined by HSNO regulations, and is exempt from NZIoC listing requirements.

Contact 3M Korea for more information.

This product may contain component(s) that are regulated by the following:

Chemical Control Law (CCL): All ingredients in this product are listed on Korea Existing Chemical Inventory (KECI). Occupational Safety and Health Law: This product is an article and is exempt from Industrial Safety and Health Law Hazardous Goods Safety and Control Law: This product is not classified as hazardous goods under Korea Hazardous Goods Safety Contol Law.

Waste Control Law: This product is classified as designated waste Other domestic and international regulations – Not applicable

SECTION 16: Other information

16.1. References:

Industrial Safety and Health Act, Hazardous Goods Safety and Control Laws, Waste Control Laws.

16.2. Initial creation date: Not Available16.3. Revision frequency and final revision date:

Revision frequency: Not Available Final Revision Date: 2016/08/30

16.4. Others: Not Applicable

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3M Korea SDSs are available at www.3m.com/kr