

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 KoreaADDRESS:19F, 82, Uisadang-daero, Yeongdeungpo-gu, Seoul, 150-705, KoreaTelephone:82-2-3771-4114Website:www.3m.com/krEmergency82-80-033-4114Telephone:82-80-033-4114

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

Appearance/Odor White with blue PET film
Odor threshold Not Applicable
pH Not Applicable
Melting point/Freezing point Not Applicable
Boiling point/Initial boiling point/Boiling range Not Applicable
Flash PointNot 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
Relative Density	No Data Available
Water solubility	Nil
Solubility- non-water	Not Applicable
Autoignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Molecular weight	Not 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> Carbon monoxide Carbon dioxide <u>Condition</u> Oxidation, heat or reaction 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

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

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

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

Material	Cas #	Organism	Туре	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 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

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Overall product		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 Available

16.3. 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