Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

1.1. Product identifier
3M™ Ceramic Boost Spray, 39905

Product Identification Numbers
60-4551-1183-5

1.2. Recommended use and restrictions on use

Recommended use
Automotive

1.3. Supplier's details
ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor
Telephone: 03-7884 2888
E Mail: 3mmyehsr@mmm.com
Website: www.3M.com.my

1.4. Emergency telephone number
+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Flammable Liquid: Category 2.
Acute Aquatic Toxicity: Category 1.
Chronic Aquatic Toxicity: Category 1.

2.2. Label elements
Signal word
Danger

Symbols
Flame |Environment |

Pictograms

Hazard Statements:

H225	Highly flammable liquid and vapor.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

General:

P102	Keep out of reach of children.

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.

Response:

P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
HEXAMETHYLDISILOXANE	107-46-0	60 - 90
Siloxane Polymer	Trade Secret	7 - 13
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	< 3

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

No need for first aid is anticipated.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

No need for first aid is anticipated.

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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters
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 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
Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. 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 physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

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. Exposure controls

8.2.1. Engineering controls
Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Safety Glasses with side shields

Skin/hand protection
Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of nitrile rubber are recommended. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.
Gloves made from the following material(s) are recommended: Polymer laminate

Respiratory protection
None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Color	Colorless
Odor	Slight Minty
Odor threshold	*No Data Available*
pH	*No Data Available*
Melting point/Freezing point	*No Data Available*
Boiling point/Initial boiling point/Boiling range	100 ºC
Flash Point	-11 ºC [*Test Method:*Closed Cup]
Evaporation rate	3.8 [*Ref Std:*BUOAC=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.25 % volume
Flammable Limits(UEL)	18.6 % volume
Vapor Pressure	4,299.6 Pa [@ 20 ºC] [*Ref Std:*AIR=1]
Vapor Density and/or Relative Vapor Density	5.5 [*Ref Std:*AIR=1]
Density	0.79 g/cm3 [*Ref Std:*WATER=1]

Relative Density	0.79 [*Ref Std:*WATER=1]
Water solubility	Negligible
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	340 ºC
Decomposition temperature	*No Data Available*
Viscosity/Kinematic Viscosity	0.7 mm2/sec
Volatile Organic Compounds	2.99 % weight
Percent volatile	*No Data Available*
VOC Less H2O & Exempt Solvents	*No Data Available*
Average particle size	*No Data Available*
Bulk density	*No Data Available*
Molecular weight	*No Data Available*
Softening point	*No Data Available*

Nanoparticles
This material does not contain nanoparticles.
* The values noted with an asterisk (*) in the above table are representative values based on testing of raw materials and selected products. Additionally, a material's characteristics may change depending upon the process and conditions of use at a facility, including further changes in particle size, or mixture with other materials. In order to obtain specific data for the material, we recommend the user conduct characterization testing based on the use factors at the specific facility.

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 polymerization will not occur.

10.4. Conditions to avoid
Heat

10.5. Incompatible materials
Not determined

No Data Available

10.6. Hazardous decomposition products

Substance	**Condition**
None known.	

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 known health effects.

Skin Contact:
Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:
Sprayed material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:
No known health effects.

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	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
HEXAMETHYLDISILOXANE	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEXAMETHYLDISILOXANE	Inhalation-Vapor (4 hours)	Rat	LC50 106 mg/l
HEXAMETHYLDISILOXANE	Ingestion	Rat	LD50 > 5,000 mg/kg
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Inhalation-Vapor (4 hours)	Rat	LC50 > 11 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
HEXAMETHYLDISILOXANE	Rabbit	No significant irritation
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
HEXAMETHYLDISILOXANE	Rabbit	Mild irritant
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Rabbit	No significant irritation

Sensitization:

Skin Sensitization

Name	Species	Value

HEXAMETHYLDISILOXANE	Guinea pig	Not classified
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Guinea pig	Not classified

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
HEXAMETHYLDISILOXANE	In Vitro	Not mutagenic
HEXAMETHYLDISILOXANE	In vivo	Not mutagenic
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	In Vitro	Not mutagenic
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
HEXAMETHYLDISILOXANE	Inhalation	Rat	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
HEXAMETHYLDISILOXANE	Inhalation	Not classified for male reproduction	Rat	NOAEL 33 mg/l	13 weeks

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HEXAMETHYLDISILOXANE	Inhalation	respiratory irritation	Not classified	Rat	NOAEL 33 mg/l	6 hours
HEXAMETHYLDISILOXANE	Ingestion	central nervous system depression	Not classified	Guinea pig	LOAEL 22,900 mg/kg	not applicable
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL not available	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
HEXAMETHYLDISILOXANE	Dermal	liver | kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
HEXAMETHYLDISILOXANE	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 4 mg/l	13 weeks
HEXAMETHYLDISILOXANE	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 33 mg/l	13 weeks
HEXAMETHYLDISILOXANE	Inhalation	liver	Not classified	Multiple animal species	NOAEL 29 mg/l	15 days
HEXAMETHYLDISILOX	Inhalation	heart | endocrine	Not classified	Rat	NOAEL 33	13 weeks

ANE		system | immune system | nervous system | respiratory system			mg/l	

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 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:
GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:
GHS Chronic 1: Very toxic to aquatic life with long lasting effects.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
HEXAMETHYLDISILOXANE	107-46-0	Green Algae	Experimental	70 hours	EC50	>0.55 mg/l
HEXAMETHYLDISILOXANE	107-46-0	Rainbow Trout	Experimental	96 hours	LC50	0.46 mg/l
HEXAMETHYLDISILOXANE	107-46-0	Green Algae	Experimental	70 hours	EC10	0.09 mg/l
HEXAMETHYLDISILOXANE	107-46-0	Water flea	Experimental	21 days	NOEC	0.08 mg/l
Siloxane Polymer	Trade Secret		Data not available or insufficient for classification			N/A
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Green algae	Experimental	72 hours	EC50	>1,170 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Water flea	Experimental	48 hours	EC50	>864 mg/l

SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Green algae	Experimental	72 hours	NOEC	221 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Activated sludge	Analogous Compound	3 hours	NOEC	1,000 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Cress	Experimental	17 days	NOEC	>=100 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HEXAMETHYLDISILOXANE	107-46-0	Experimental Photolysis		Photolytic half-life (in air)	22.5 days (t 1/2)	Non-standard method
HEXAMETHYLDISILOXANE	107-46-0	Experimental Hydrolysis		Hydrolytic half-life	120 hours (t 1/2)	Non-standard method
Siloxane Polymer	Trade Secret	Data not availbl-insufficient			N/A	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Modeled Hydrolysis		Hydrolytic half-life	4.1 hours (t 1/2)	Catalogic™
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Experimental Biodegradation	28 days	Carbon dioxide evolution	47 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Biodegradation	14 days	Biological Oxygen Demand	92 % BOD/ThBOD	OECD 301C - MITI (I)

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
HEXAMETHYLDISILOXANE	107-46-0	Experimental BCF-Carp	56 days	Bioaccumulation Factor	2410	OECD 305C-Bioaccum degree fish

Siloxane Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Bioconcentration		Log of Octanol/H2O part. coeff	-0.77	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Modeled Bioconcentration		Log of Octanol/H2O part. coeff	0.7	Episuite™
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Bioconcentration		Log of Octanol/H2O part. coeff	-1.0	Episuite™

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

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Marine Transport (IMDG)

UN Number:UN1263
Proper Shipping Name:PAINT RELATED MATERIAL
Technical Name: None assigned.
Hazard Class/Division:3
Subsidiary Risk: None assigned.
Packing Group:II
Limited Quantity: Yes
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Air Transport (IATA)

UN Number:UN1263
Proper Shipping Name:PAINT RELATED MATERIAL

Technical Name: None assigned.
Hazard Class/Division:3
Subsidiary Risk: None assigned.
Packing Group:II
Limited Quantity: None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's 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 above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

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. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

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 Malaysia SDSs are available at www.3M.com.my