



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Aerospace Sealant AC-665 B-1/2 PMF

Product Identification Numbers

70-0052-0335-4, 70-0052-0337-0, 70-0052-0338-8, 70-0052-0341-2, 70-0052-0609-2, 70-0052-0611-8, 70-0052-0622-5, 70-0052-1956-6, 70-0052-1957-4

1.2. Recommended use and restrictions on use

Recommended use

For industrial or professional use only., Sealant

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Aerospace and Commercial Transportation 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

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 2.

Carcinogenicity: Category 1B.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

May cause cancer.

Causes damage to organs:

kidney/urinary tract |

Causes damage to organs through prolonged or repeated exposure:

nervous system |

respiratory system |

Precautionary Statements

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

2.3. Hazards not otherwise classified

None.

1% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
POLYSULFIDE RUBBER	68611-50-7	55 - 65
CALCIUM CARBONATE	471-34-1	15 - 25
CALCIUM CHROMATE	13765-19-0	2 - 8 Trade Secret *
MANGANESE DIOXIDE	1313-13-9	2 - 8 Trade Secret *
HYDROGENATED TERPHENYL	61788-32-7	1 - 5 Trade Secret *
TITANIUM DIOXIDE	13463-67-7	1 - 2 Trade Secret *
FATTY ACIDS, C14-18	67701-02-4	0.1 - 2
STRONTIUM CHROMATE (VI)	7789-06-2	0.1 - 1 Trade Secret *
DIPHENYLGUANIDINE	102-06-7	0.1 - 1 Trade Secret *
PHENOL-FORMALDEHYDE POLYMER	9003-35-4	0.1 - 1 Trade Secret *
SODIUM HYDROXIDE	1310-73-2	0 - 0.5
DISPERSING AGENT	68412-53-3	0.1 - 0.5
ZINC OXIDE	1314-13-2	< 0.02

*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:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

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

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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

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

Formaldehyde

Carbon monoxide

Condition

During Combustion

During Combustion

Carbon dioxide

During Combustion

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**

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. 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.

6.3. Methods and material for containment and cleaning up

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. Place in a closed 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.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases.

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	C.A.S. No.	Agency	Limit type	Additional Comments
SODIUM HYDROXIDE	1310-73-2	ACGIH	CEIL:2 mg/m ³	
SODIUM HYDROXIDE	1310-73-2	CMRG	TWA:2 mg/m ³	
SODIUM HYDROXIDE	1310-73-2	OSHA	TWA:2 mg/m ³	
MANGANESE COMPOUNDS	1313-13-9	OSHA	CEIL(as Mn):5 mg/m ³	
MANGANESE, INORGANIC COMPOUNDS	1313-13-9	ACGIH	TWA(as Mn, inhalable fraction):0.1 mg/m ³ ;TWA(as Mn, respirable fraction):0.02 mg/m ³	A4: Not class. as human carcin
ZINC OXIDE	1314-13-2	ACGIH	TWA(respirable fraction):2 mg/m ³ ;STEL(respirable	

			fraction):10 mg/m3	
ZINC OXIDE	1314-13-2	OSHA	TWA(as fume):5 mg/m3;TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
TITANIUM DIOXIDE	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
TITANIUM DIOXIDE	13463-67-7	CMRG	TWA(as respirable dust):5 mg/m3	
TITANIUM DIOXIDE	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
CALCIUM CHROMATE	13765-19-0	ACGIH	TWA(as Cr):0.001 mg/m3	A2: Suspected human carcin.
CHROMATES	13765-19-0	OSHA	CEIL:0.1 mg/m3	
CHROMIUM (HEXAVALENT COMPOUNDS)	13765-19-0	OSHA	TWA:0.005 mg/m3	Skin Notation, 29 CFR 1910.1026
CALCIUM CARBONATE	471-34-1	CMRG	TWA:10 mg/m3;STEL:20 mg/m3	
Limestone	471-34-1	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
HYDROGENATED TERPHENYL	61788-32-7	ACGIH	TWA:0.5 ppm	
CHROMATES	7789-06-2	OSHA	CEIL:0.1 mg/m3	
CHROMIUM (HEXAVALENT COMPOUNDS)	7789-06-2	OSHA	TWA:0.005 mg/m3	Skin Notation, 29 CFR 1910.1026
STRONTIUM CHROMATE (VI)	7789-06-2	ACGIH	TWA(as Cr):0.0005 mg/m3	A2: Suspected human carcin.

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection 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:

Indirect Vented Goggles

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Odor, Color, Grade:	Sulphurous odor; Dark gray paste
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	>=200 °F [Test Method: Closed Cup]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Specific Gravity	1.53 [Ref Std: WATER=1]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Volatile Organic Compounds	5.7 g/l [Test Method: calculated SCAQMD rule 443.1]
VOC Less H2O & Exempt Solvents	5.7 g/l [Test Method: calculated SCAQMD rule 443.1]

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

Strong bases

Strong acids

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

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:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Prolonged or repeated exposure may cause target organ effects:

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
CR 6 CMPDS	13765-19-0	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
CR 6 CMPDS	13765-19-0	Known human carcinogen	National Toxicology Program Carcinogens
CR 6 CMPDS	13765-19-0	Cancer hazard	OSHA Carcinogens
CR 6 CMPDS	7789-06-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
CR 6 CMPDS	7789-06-2	Known human carcinogen	National Toxicology Program Carcinogens
CR 6 CMPDS	7789-06-2	Cancer hazard	OSHA Carcinogens
TITANIUM DIOXIDE	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

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
POLYSULFIDE RUBBER	Dermal	Rat	LD50 > 7,800 mg/kg
POLYSULFIDE RUBBER	Ingestion	Rat	LD50 > 5,000 mg/kg
CALCIUM CARBONATE	Dermal	Rat	LD50 > 2,000 mg/kg
CALCIUM CARBONATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
CALCIUM CARBONATE	Ingestion	Rat	LD50 6,450 mg/kg
MANGANESE DIOXIDE	Dermal	Rat	LD50 2,000 mg/kg
MANGANESE DIOXIDE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.5 mg/l
MANGANESE DIOXIDE	Ingestion	Rat	LD50 > 2,197 mg/kg
CALCIUM CHROMATE	Dermal		estimated to be > 5,000 mg/kg
CALCIUM CHROMATE	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
CALCIUM CHROMATE	Inhalation-Vapor		estimated to be > 50 mg/l
CALCIUM CHROMATE	Ingestion		estimated to be 300 - 2,000 mg/kg
HYDROGENATED TERPHENYL	Dermal	Rabbit	LD50 6,800 mg/kg
HYDROGENATED TERPHENYL	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 11.1 mg/l
HYDROGENATED TERPHENYL	Ingestion	Rat	LD50 > 10,000 mg/kg
TITANIUM DIOXIDE	Dermal	Rabbit	LD50 > 10,000 mg/kg
TITANIUM DIOXIDE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
TITANIUM DIOXIDE	Ingestion	Rat	LD50 > 10,000 mg/kg
STRONTIUM CHROMATE (VI)	Ingestion	Rat	LD50 3,118 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Dermal	Rat	LD50 > 2,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Ingestion	Rat	LD50 > 2,900 mg/kg
DIPHENYLGUANIDINE	Dermal		estimated to be > 5,000 mg/kg
DIPHENYLGUANIDINE	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
DIPHENYLGUANIDINE	Inhalation-Vapor		estimated to be > 50 mg/l
DIPHENYLGUANIDINE	Ingestion		estimated to be 300 - 2,000 mg/kg
DISPERSING AGENT	Ingestion	Rat	LD50 4,450
ZINC OXIDE	Dermal		LD50 estimated to be > 5,000 mg/kg
ZINC OXIDE	Inhalation-Dust/Mist	Rat	LC50 > 5.7 mg/l

	(4 hours)		
ZINC OXIDE	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
POLYSULFIDE RUBBER	Rabbit	No significant irritation
CALCIUM CARBONATE	Rabbit	No significant irritation
HYDROGENATED TERPHENYL	Rabbit	No significant irritation
TITANIUM DIOXIDE	Rabbit	No significant irritation
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Mild irritant
SODIUM HYDROXIDE	Rabbit	Corrosive
DISPERSING AGENT	Rabbit	Irritant
ZINC OXIDE	Human and animal	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
POLYSULFIDE RUBBER	Rabbit	No significant irritation
CALCIUM CARBONATE	Rabbit	No significant irritation
HYDROGENATED TERPHENYL	Rabbit	No significant irritation
TITANIUM DIOXIDE	Rabbit	No significant irritation
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Moderate irritant
SODIUM HYDROXIDE	Rabbit	Corrosive
DISPERSING AGENT	Rabbit	Corrosive
ZINC OXIDE	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
POLYSULFIDE RUBBER		Not sensitizing
HYDROGENATED TERPHENYL	Human	Not sensitizing
TITANIUM DIOXIDE	Human and animal	Not sensitizing
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Sensitizing
SODIUM HYDROXIDE	Human	Not sensitizing
DISPERSING AGENT	Human	Not sensitizing
ZINC OXIDE	Guinea pig	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitization

Name	Species	Value
PHENOL-FORMALDEHYDE POLYMER	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
HYDROGENATED TERPHENYL	In vivo	Not mutagenic
TITANIUM DIOXIDE	In Vitro	Not mutagenic
TITANIUM DIOXIDE	In vivo	Not mutagenic
SODIUM HYDROXIDE	In Vitro	Not mutagenic
DISPERSING AGENT	In Vitro	Not mutagenic
ZINC OXIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification

ZINC OXIDE	In vivo	Some positive data exist, but the data are not sufficient for classification
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Carcinogenicity

Name	Route	Species	Value
TITANIUM DIOXIDE	Ingestion	Multiple animal species	Not carcinogenic
TITANIUM DIOXIDE	Inhalation	Rat	Carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
HYDROGENATED TERPHENYL	Ingestion	Not toxic to female reproduction	Rat	NOAEL 81 mg/kg/day	2 generation
HYDROGENATED TERPHENYL	Ingestion	Not toxic to male reproduction	Rat	NOAEL 62 mg/kg/day	2 generation
HYDROGENATED TERPHENYL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	2 generation
ZINC OXIDE	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	premating & during gestation

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
PHENOL-FORMALDEHYDE POLYMER	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
SODIUM HYDROXIDE	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CALCIUM CARBONATE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
HYDROGENATED TERPHENYL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/l	90 days
HYDROGENATED TERPHENYL	Ingestion	endocrine system blood liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 144 mg/kg/day	14 weeks
TITANIUM DIOXIDE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.010 mg/l	2 years
TITANIUM DIOXIDE	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
PHENOL-FORMALDEHYDE POLYMER	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
ZINC OXIDE	Ingestion	nervous system	Some positive data exist, but the	Rat	NOAEL 600	10 days

			data are not sufficient for classification		mg/kg/day	
ZINC OXIDE	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months

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**Ecotoxicological information**

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

Chemical fate information

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

SECTION 13: Disposal considerations**13.1. Disposal methods**

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D007 (Chromium)

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
MANGANESE DIOXIDE (MANGANESE COMPOUNDS)	1313-13-9	2 - 8
CALCIUM CHROMATE (CHROMIUM (HEXAVALENT COMPOUNDS))	13765-19-0	2 - 8
STRONTIUM CHROMATE (VI) (CHROMIUM (HEXAVALENT COMPOUNDS))	7789-06-2	0.1 - 1

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
CALCIUM CHROMATE (CHROMIUM (HEXAVALENT COMPOUNDS))	13765-19-0	Toxic Substances Control Act (TSCA) 6 Banned or Restricted Use Chemicals	Applicable
STRONTIUM CHROMATE (VI) (CHROMIUM (HEXAVALENT COMPOUNDS))	7789-06-2	Toxic Substances Control Act (TSCA) 6 Banned or Restricted Use Chemicals	Applicable

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Female reproductive toxin
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Male reproductive toxin
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Carcinogen
CHROMIUM (HEXAVALENT COMPOUNDS)	None	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 **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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