Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
3M™ Acryl-Green Spot Putty PN 05096

Product identification numbers
41-0003-6502-7 41-0003-8043-0 60-4550-4709-6 HB-0043-1185-6 HB-0043-1222-7

1.2. Recommended use and restrictions on use

Recommended use
Automotive, For Industrial or Professional use.

1.3 Supplier's details
Division: Automotive Aftermarket
ADDRESS: Rodovia Anhanguera, Km 110 - 13181-900 - Sumaré - SP - Brazil
Telephone: 8000132333
E Mail: falecoma3M@mmm.com
Website: www.3M.com.br

1.4. Emergency telephone number
(19) 3838 7333

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
Flammable Liquid: Category 2.
Serious Eye Damage/Irritation: Category 2A.
Skin Corrosion/Irritation: Category 2.
Reproductive Toxicity: Category 1B.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (central nervous system): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.
Acute Aquatic Toxicity: Category 3.

2.2. Label elements
SIGNAL WORD
Danger

Symbols
Flame | Exclamation mark | Health Hazard |

Pictograms

HAZARD STATEMENTS

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure: nervous system | respiratory system | sensory organs |
H402	Harmful to aquatic life.

PRECAUTIONARY STATEMENTS

General:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Prevention:

P201	Obtain special instructions before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P280D	Wear protective gloves, protective clothing, and eye/face protection.
P280E	Wear protective gloves.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P370 + P378G	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

P405	Store locked up.

Disposal:

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

18% of the mixture consists of ingredients of unknown acute oral toxicity.
25% of the mixture consists of ingredients of unknown acute dermal toxicity.
15% of the mixture consists of ingredients of unknown acute inhalation toxicity.

18% of the mixture consists of ingredients of unknown hazards to the aquatic environment.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
TALC	14807-96-6	15 - 40
TOLUENE	108-88-3	10 - 30
TITANIUM DIOXIDE	13463-67-7	7 - 13
ACRYLIC POLYMER(S)	Trade Secret	7 - 13
MAGNESIUM CARBONATE	546-93-0	3 - 7
Benzoate Esters	Trade Secret	3 - 7
Quat. Ammonium Compounds	Trade Secret	1 - 5
BUTYL ALCOHOL	71-36-3	1 - 5
ETHYLBENZENE	100-41-4	< 0.15
Benzene	71-43-2	< 0.05

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 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.

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. 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. 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. An appropriate aqueous film forming foam (AFFF) is recommended. 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Do not use in a confined area with minimal air exchange. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. 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. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

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
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
ETHYLBENZENE	100-41-4	ACGIH	TWA:20 ppm	A3: Confirmed animal carcin.
ETHYLBENZENE	100-41-4	OSHA	TWA:435 mg/m3(100 ppm)	
ETHYLBENZENE	100-41-4	Brazil OELs	TWA(8 hours):340 mg/m3(78 ppm)	Source: Brazil OELs
ETHYLBENZENE	100-41-4	CMRG	TWA:25 ppm;STEL:75 ppm	

TOLUENE	108-88-3	CMRG	STEL:75 ppm	Skin Notation
TOLUENE	108-88-3	Brazil OELs	TWA(8 hours):290 mg/m3(78 ppm)	Source: Brazil OELs, skin
TOLUENE	108-88-3	OSHA	TWA:200 ppm;CEIL:300 ppm	
TOLUENE	108-88-3	ACGIH	TWA:20 ppm	A4: Not class. as human carcin
TITANIUM DIOXIDE	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
TITANIUM DIOXIDE	13463-67-7	Brazil OELs	TWA(8 hours):10 mg/m3	
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	
TALC	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
TALC	14807-96-6	CMRG	TWA(as respirable dust):0.5 mg/m3	
TALC	14807-96-6	Brazil OELs	TWA(respirable fraction)(8 hours):2 mg/m3	
TALC	14807-96-6	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
MAGNESIUM CARBONATE	546-93-0	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
BUTYL ALCOHOL	71-36-3	Brazil OELs	CEIL:115 mg/m3(40 ppm)	Source: Brazil OELs, skin
BUTYL ALCOHOL	71-36-3	ACGIH	TWA:20 ppm	
BUTYL ALCOHOL	71-36-3	OSHA	TWA:300 mg/m3(100 ppm)	
Benzene	71-43-2	ACGIH	TWA:0.5 ppm;STEL:2.5 ppm	A1: Confirmed human carcin., Skin Notation
Benzene	71-43-2	Brazil OELs	TWA(8 hours):0.5 ppm;STEL(15 minutes):2.5 ppm	Skin Notation
Benzene	71-43-2	OSHA	TWA:1 ppm;TWA:10 ppm;STEL:5 ppm;CEIL:25 ppm	29 CFR 1910.1028

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
Brazil OELs : Brazil. (NR - 15, Annex 11) Hazardous Chemical Agents for which Occupational Exposure and Inspection Limits have been Established
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
ppm: parts per million
mg/m3: milligrams per cubic metre
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Provide appropriate local exhaust ventilation for sanding, grinding or machining. 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. 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:
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.
Gloves made from the following material(s) are recommended: Fluoroelastomer

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

Physical state	Liquid
Specific Physical Form:	Paste
Appearance/Odor	Solvent Odor, Green Smooth Paste
Odor threshold	*No Data Available*
pH	*Not Applicable*
Melting point/Freezing point	*No Data Available*
Boiling point/Initial boiling point/Boiling range	>=93.3 ºC
Flash Point	17.2 ºC [*Test Method:* Closed Cup]
Evaporation rate	*No Data Available*
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1 %
Flammable Limits(UEL)	13 %
Vapor Pressure	<=186,158.4 Pa [@ 55 ºC] [*Details:* MITS data]
Vapor Density	*No Data Available*
Density	1.46 - 1.6 g/ml
Relative Density	1.46 - 1.60 [*Ref Std:* WATER=1]
Water solubility	Nil
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*No Data Available*
Viscosity	200 - 400 Pa-s
Hazardous Air Pollutants	24.13 % weight [*Test Method:* Calculated]
Volatile Organic Compounds	3.51 lb/gal [*Test Method:* calculated SCAQMD rule 443.1]
Volatile Organic Compounds	420 g/l [*Test Method:* calculated SCAQMD rule 443.1]
Volatile Organic Compounds	27.5 % weight [*Test Method:* calculated per CARB title 2]

Percent volatile	27.6 %
VOC Less H2O & Exempt Solvents	421 g/l [*Test Method:* calculated SCAQMD rule 443.1]

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
Sparks and/or flames
Heat

10.5. Incompatible materials
Strong acids
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance	Condition
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Toxic Vapor, Gas, Particulate	Not Specified

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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

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

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 target organ effects after ingestion.

Target Organ Effects:

Single exposure may cause:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

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.

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.

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	Dermal		No data available; calculated ATE > 5,000 mg/kg
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
TALC	Dermal		LD50 Not available
TALC	Ingestion		LD50 Not available
TOLUENE	Dermal	Rat	LD50 12,000 mg/kg
TOLUENE	Inhalation-Vapor (4 hours)	Rat	LC50 30 mg/l
TOLUENE	Ingestion	Rat	LD50 5,550 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
MAGNESIUM CARBONATE	Ingestion	Mouse	LD50 > 5,000 mg/kg
BUTYL ALCOHOL	Dermal	Rabbit	LD50 3,402 mg/kg

BUTYL ALCOHOL	Inhalation-Vapor (4 hours)	Rat	LC50 24 mg/l
BUTYL ALCOHOL	Ingestion	Rat	LD50 2,290 mg/kg
ETHYLBENZENE	Dermal	Rabbit	LD50 15,433 mg/kg
ETHYLBENZENE	Inhalation-Vapor (4 hours)	Rat	LC50 17.4 mg/l
ETHYLBENZENE	Ingestion	Rat	LD50 4,769 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
TALC	Rabbit	No significant irritation
TOLUENE	Rabbit	Irritant
TITANIUM DIOXIDE	Rabbit	No significant irritation
MAGNESIUM CARBONATE	In vitro data	Minimal irritation
BUTYL ALCOHOL	Rabbit	Mild irritant
ETHYLBENZENE	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
TALC	Rabbit	No significant irritation
TOLUENE	Rabbit	Moderate irritant
TITANIUM DIOXIDE	Rabbit	No significant irritation
MAGNESIUM CARBONATE	Rabbit	Mild irritant
BUTYL ALCOHOL	Rabbit	Severe irritant
ETHYLBENZENE	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
TOLUENE	Guinea pig	Not sensitizing
TITANIUM DIOXIDE	Human and animal	Not sensitizing
BUTYL ALCOHOL	Human	Not sensitizing
ETHYLBENZENE	Human	Not sensitizing

Respiratory Sensitization

Name	Species	Value
TALC	Human	Not sensitizing

Germ Cell Mutagenicity

Name	Route	Value
TALC	In Vitro	Not mutagenic
TALC	In vivo	Not mutagenic
TOLUENE	In Vitro	Not mutagenic
TOLUENE	In vivo	Not mutagenic
TITANIUM DIOXIDE	In Vitro	Not mutagenic
TITANIUM DIOXIDE	In vivo	Not mutagenic
BUTYL ALCOHOL	In vivo	Not mutagenic
BUTYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYLBENZENE	In vivo	Not mutagenic
ETHYLBENZENE	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
TALC	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
TOLUENE	Dermal	Mouse	Some positive data exist, but the data are not

			sufficient for classification
TOLUENE	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
TOLUENE	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
TITANIUM DIOXIDE	Ingestion	Multiple animal species	Not carcinogenic
TITANIUM DIOXIDE	Inhalation	Rat	Carcinogenic
ETHYLBENZENE	Inhalation	Multiple animal species	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
TALC	Ingestion	Not toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesis
TOLUENE	Inhalation	Some positive female reproductive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
TOLUENE	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.3 mg/l	1 generation
TOLUENE	Ingestion	Toxic to development	Rat	LOAEL 520 mg/kg/day	during gestation
TOLUENE	Inhalation	Toxic to development	Human	NOAEL Not available	poisoning and/or abuse
BUTYL ALCOHOL	Ingestion	Not toxic to female reproduction	Rat	NOAEL 5,000 mg/kg/day	premating & during gestation
BUTYL ALCOHOL	Ingestion	Not toxic to male reproduction	Rat	NOAEL 500 mg/kg/day	4 days
BUTYL ALCOHOL	Inhalation	Not toxic to male reproduction	Rat	NOAEL 18 mg/l	6 weeks
BUTYL ALCOHOL	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 10.6 mg/l	during gestation
ETHYLBENZENE	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 4.3 mg/l	premating & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
TOLUENE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
TOLUENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
TOLUENE	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
TOLUENE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
BUTYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
BUTYL ALCOHOL	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
BUTYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

ETHYLBENZENE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
ETHYLBENZENE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
TALC	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
TALC	Inhalation	pulmonary fibrosis | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 18 mg/m3	113 weeks
TOLUENE	Inhalation	auditory system | nervous system | eyes | olfactory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	poisoning and/or abuse
TOLUENE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
TOLUENE	Inhalation	heart | liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
TOLUENE	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
TOLUENE	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
TOLUENE	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
TOLUENE	Inhalation	hematopoietic system | vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
TOLUENE	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
TOLUENE	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
TOLUENE	Ingestion	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
TOLUENE	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
TOLUENE	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
TOLUENE	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	4 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
BUTYL ALCOHOL	Inhalation	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.3 mg/l	3 months
BUTYL ALCOHOL	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
BUTYL ALCOHOL	Inhalation	liver | kidney and/or bladder | respiratory system	Some positive data exist, but the data are not sufficient for classification	Guinea pig	NOAEL Not available	3 months

BUTYL ALCOHOL	Inhalation	nervous system	All data are negative	Rat	NOAEL 9.09 mg/l	13 weeks
BUTYL ALCOHOL	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	13 weeks
ETHYLBENZENE	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	2 years
ETHYLBENZENE	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	103 weeks
ETHYLBENZENE	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 3.4 mg/l	28 days
ETHYLBENZENE	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2.4 mg/l	5 days
ETHYLBENZENE	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3.3 mg/l	103 weeks
ETHYLBENZENE	Inhalation	bone, teeth, nails, and/or hair | muscles	All data are negative	Multiple animal species	NOAEL 4.2 mg/l	90 days
ETHYLBENZENE	Inhalation	heart | immune system | respiratory system	All data are negative	Multiple animal species	NOAEL 3.3 mg/l	2 years
ETHYLBENZENE	Ingestion	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 680 mg/kg/day	6 months

Aspiration Hazard

Name	Value
TOLUENE	Aspiration hazard
BUTYL ALCOHOL	Some positive data exist, but the data are not sufficient for classification
ETHYLBENZENE	Aspiration hazard

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 3: Harmful to aquatic life.

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

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
TOLUENE	108-88-3	Green Algae	Experimental	72 hours	Effect Concentration	12.5 mg/l

					50%	
TOLUENE	108-88-3	Water flea	Experimental	48 hours	Effect Concentration 50%	3.78 mg/l
TOLUENE	108-88-3	Coho Salmon	Experimental	96 hours	Lethal Concentration 50%	5.5 mg/l
TOLUENE	108-88-3	Sheepshead Minnow	Experimental	28 days	No obs Effect Conc	3.2 mg/l
BUTYL ALCOHOL	71-36-3	Green algae	Experimental	96 hours	Effect Concentration 50%	225 mg/l
BUTYL ALCOHOL	71-36-3	Water flea	Experimental	48 hours	Effect Concentration 50%	>500 mg/l
BUTYL ALCOHOL	71-36-3	Ricefish	Experimental	96 hours	Lethal Concentration 50%	>100 mg/l
BUTYL ALCOHOL	71-36-3	Green algae	Experimental	72 hours	No obs Effect Conc	180 mg/l
BUTYL ALCOHOL	71-36-3	Water flea	Experimental	21 days	No obs Effect Conc	4.1 mg/l
BUTYL ALCOHOL	71-36-3	Green Algae	Experimental	72 hours	No obs Effect Conc	180 mg/l
BUTYL ALCOHOL	71-36-3	Green Algae	Experimental	96 hours	Effect Concentration 50%	225 mg/l
Benzene	71-43-2	Water flea	Experimental	48 hours	Effect Concentration 50%	9.23 mg/l
Benzene	71-43-2	Green Algae	Experimental	72 hours	Effect Concentration 50%	29 mg/l
Benzene	71-43-2	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	5.3 mg/l
MAGNESIUM CARBONATE	546-93-0		Data not available or insufficient for classification			
TALC	14807-96-6		Data not available or insufficient for classification			
TITANIUM DIOXIDE	13463-67-7	Water flea	Experimental	48 hours	Effect Concentration 50%	>100 mg/l
TITANIUM DIOXIDE	13463-67-7	Sheepshead Minnow	Experimental	96 hours	Lethal Concentration 50%	>240 mg/l
TITANIUM DIOXIDE	13463-67-7	Crustecea other	Experimental	96 hours	Effect Concentration 50%	>300 mg/l
TITANIUM DIOXIDE	13463-67-7	Fish	Experimental	30 days	No obs Effect Conc	>=1,000 mg/l

TITANIUM DIOXIDE	13463-67-7	Water flea	Experimental	30 days	No obs Effect Conc	3 mg/l
ETHYLBENZENE	100-41-4	Green algae	Laboratory	96 hours	Effect Concentration 50%	3.6 mg/l
ETHYLBENZENE	100-41-4	Water flea	Experimental	24 hours	Effect Concentration 50%	1.81 mg/l
ETHYLBENZENE	100-41-4	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	4.2 mg/l
ETHYLBENZENE	100-41-4	Green Algae	Experimental	96 hours	Effect Concentration 50%	3.6 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
TOLUENE	108-88-3	Experimental Photolysis		Photolytic half-life (in air)	5.38 days (t 1/2)	Other methods
TOLUENE	108-88-3	Experimental Biodegradation	14 days	Biological Oxygen Demand	100 % weight	OECD 301C - MITI (I)
BUTYL ALCOHOL	71-36-3	Experimental Photolysis		Photolytic half-life (in air)	3.37 days (t 1/2)	Other methods
BUTYL ALCOHOL	71-36-3	Experimental Biodegradation	19 days	Dissolv. Organic Carbon Deplet	98 % weight	OECD 301E - Modified OECD Scre
Benzene	71-43-2	Experimental Photolysis		Photolytic half-life (in air)	26.1 days (t 1/2)	Other methods
Benzene	71-43-2	Experimental Biodegradation	28 days	Biological Oxygen Demand	63 % weight	OECD 301F - Manometric Respiro
MAGNESIUM CARBONATE	546-93-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
TALC	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
TITANIUM DIOXIDE	13463-67-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
ETHYLBENZENE	100-41-4	Experimental Photolysis		Photolytic half-life (in air)	4.26 days (t 1/2)	
ETHYLBENZENE	100-41-4	Laboratory Biodegradation	14 days	Biological Oxygen Demand	81 % weight	Other methods

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
TOLUENE	108-88-3	Experimental		Log of	2.73	Other methods

		Bioconcentration		Octanol/H2O part. coeff		
BUTYL ALCOHOL	71-36-3	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	0.88	Other methods
Benzene	71-43-2	Experimental BCF - Other		Bioaccumulation Factor	4.26	Other methods
Benzene	71-43-2	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.13	Other methods
MAGNESIUM CARBONATE	546-93-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
TALC	14807-96-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
TITANIUM DIOXIDE	13463-67-7	Experimental BCF - Other	42 days	Bioaccumulation Factor	9.6	Other methods
TITANIUM DIOXIDE	13463-67-7	Experimental BCF-Carp	42 days	Bioaccumulation Factor	9.6	Other methods
ETHYLBENZENE	100-41-4	Experimental BCF - Other		Bioaccumulation Factor	15	Other methods
ETHYLBENZENE	100-41-4	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	3.15	Other methods

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.

Incinerate in a permitted waste incineration facility. 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.

SECTION 14: Transport Information

Ground Transport (ANTT):
UN Number: UN 1263
Proper Shipping Name: PAINT RELATED MATERIAL

Hazard Class/Division: 3

Packing group: II
Risk Number: 33

Marine Transport (IMDG):

UN Number: UN 1263
Proper Shipping Name: PAINT RELATED MATERIAL

Hazard Class/Division: 3

Packing group: II

Marine Pollutant: No

Air Transport (IATA):

UN Number: UN 1263
Proper Shipping Name: PAINT RELATED MATERIAL

Hazard Class/Division: 3

Packing group: II

Marine Pollutant: No

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 material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

Carcinogenicity

Ingredient	C.A.S. No.	Class Description	Regulation
Arsenic	7440382	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Arsenic	7440382	Known human carcinogen	National Toxicology Program Carcinogens
ARSENIC COMPOUNDS, INORGANIC	S~AS~I	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
ARSENIC COMPOUNDS, INORGANIC	S~AS~I	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71432	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

Benzene	71432	Known human carcinogen	National Toxicology Program Carcinogens
Benzene	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Benzene	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
BERYLLIUM COMPOUNDS	S~BE~C	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
BERYLLIUM COMPOUNDS	S~BE~C	Known human carcinogen	National Toxicology Program Carcinogens
Cadmium	7440439	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Cadmium	7440439	Known human carcinogen	National Toxicology Program Carcinogens
CADMIUM COMPOUNDS	S~CD~C	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
CADMIUM COMPOUNDS	S~CD~C	Known human carcinogen	National Toxicology Program Carcinogens
CHROMIUM (HEXAVALENT COMPOUNDS)	S~CR6~C	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
CHROMIUM (HEXAVALENT COMPOUNDS)	S~CR6~C	Known human carcinogen	National Toxicology Program Carcinogens
Cobalt and inorganic cobalt compounds	S~CO~CE2	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
COBALT METAL	TW7440484A	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
COBALT METAL [DUST] WITH TUNGSTEN CARBIDE [DUST]	TW7440484B	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
COBALT METAL [DUST] WITHOUT TUNGSTEN CARBIDE [DUST]	TW7440484C	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
ETHYLBENZENE	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Lead	7439921	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Lead	7439921	Anticipated human carcinogen	National Toxicology Program Carcinogens
LEAD COMPOUNDS	S~PB~C	Anticipated human carcinogen	National Toxicology Program Carcinogens
Nickel	7440020	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Nickel	7440020	Anticipated human carcinogen	National Toxicology Program Carcinogens
NICKEL COMPOUNDS	S~NI~C	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
NICKEL COMPOUNDS (EXCEPT ALLOYS)	S~NI~CE2	Known human carcinogen	National Toxicology Program Carcinogens
SPHERICAL BERYLLIUM POWDER	7440417	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SPHERICAL BERYLLIUM POWDER	7440417	Known human carcinogen	National Toxicology Program Carcinogens
TITANIUM DIOXIDE	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Titanium oxide (TiO2)	13463677	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 **Flammability:** 3 **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.

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 Brazil SDSs are available at www.3M.com.br