Safety Data Sheet

Document Group:	11-6516-6	**Version Number:**	19.00
Issue Date:	05/25/23	**Supercedes Date:**	10/25/21

SECTION 1: Identification

1.1. Product identifier
3M™ Hot Melt Adhesive 3748 V0-PG, 3748 V0 Q, 3748 V0-TC

Product Identification Numbers
62-3768-7232-1, 62-3768-7234-7, 62-3768-9132-1, 62-3768-9330-1, 62-3768-9830-0
7010366305, 7010310223, 7000000887, 7010330271, 7000121345

1.2. Recommended use and restrictions on use

Recommended use
Hot melt adhesive.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Industrial Adhesives and Tapes 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
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements
Signal word
Danger

Symbols
Health Hazard |

Pictograms

Hazard Statements
Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure:
skin |

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.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:
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.

Supplemental Information:
Avoid contact with hot extruded molten material or applicator tip. Avoid direct eye exposure to vapors. In case of eye/skin contact with molten material, immediately flush with cold water and cover with a clean dressing. Do not attempt to remove molten material. Have burn treated by a physician. May cause thermal burns.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Ethylene-Propylene Polymer	9010-79-1	15 - 40 Trade Secret *
Brominated Flame Retardant	32588-76-4	10 - 30 Trade Secret *
Hydrocarbon Resin (NJTS Reg. No. 04499600-7069)	Trade Secret*	10 - 30 Trade Secret *
Polyethylene	9002-88-4	1 - 20 Trade Secret *
Styrene-Butadiene Polymer (NJTS Reg. No. 04499600-7070)	Trade Secret*	1 - 20 Trade Secret *
Antimony Trioxide	1309-64-4	< 10 Trade Secret *
Polyolefin Wax	8002-74-2	1 - 10 Trade Secret *
Polyolefin Blend	Mixture	1 - 10 Trade Secret *
Ethylene-Propylene-Ethylidenenorbornene Terpolymer	25038-36-2	< 2 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*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 flush skin with large amounts of cold water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Cover affected area with a clean dressing. Get immediate medical attention.

Eye Contact:
Immediately flush eyes with large amounts of water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Get immediate medical attention.

If Swallowed:
Rinse mouth. If you feel unwell, get medical attention.

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

Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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	Condition
Aldehydes	During Combustion
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Bromide	During Combustion
Hydrogen Cyanide	During Combustion
Ketones	During Combustion
Oxides of Nitrogen	During Combustion
Oxides of Antimony	During Combustion

5.3. Special protective actions for fire-fighters
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. Ventilate the area with fresh air. 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
Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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
For industrial/occupational use only. Not for consumer sale or use. 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. Avoid release to the environment. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities
No special storage requirements.

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
ANTIMONY COMPOUNDS	1309-64-4	OSHA	TWA(as Sb):0.5 mg/m3	
Antimony Trioxide	1309-64-4	ACGIH	TWA(inhalable fraction):0.02 mg/m3	A2: Suspected human carcin.
Polyolefin Wax	8002-74-2	ACGIH	TWA(as fume):2 mg/m3	
DUST, INERT OR NUISANCE	9002-88-4	OSHA	TWA(as total dust):15 mg/m3;TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m3);TWA(respirable fraction):5 mg/m3;TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m3)	

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

None required.

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: Nitrile Rubber

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.

Thermal hazards
Wear heat insulating gloves, indirect vented goggles, and a full face shield when handling hot material to prevent thermal burns.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid
Color	Light Yellow
Specific Physical Form:	Waxy Solid
Odor	Mild Resinous
Odor threshold	*No Data Available*
pH	*Not Applicable*
Melting point	*Not Applicable*
Boiling Point	*Not Applicable*
Flash Point	536 ºF [*Test Method:*Cleveland Open Cup]
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	Nil
Vapor Density	Nil
Density	1.09 g/cm3
Specific Gravity	1.09 [*Ref Std:*WATER=1]
Solubility in Water	Nil
Solubility- non-water	*No Data Available*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	626 ºF
Decomposition temperature	*No Data Available*
Viscosity	*Not Applicable*
Hazardous Air Pollutants	0 % weight [*Test Method:*Calculated]
Molecular weight	*No Data Available*
Volatile Organic Compounds	0 g/l [*Test Method:*calculated SCAQMD rule 443.1]
Percent volatile	0 % weight

VOC Less H2O & Exempt Solvents	0 g/l [*Test Method:*calculated SCAQMD rule 443.1]
Solids Content	100 %

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

Substance	Condition
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:
During heating: Thermal Burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction. May cause additional health effects (see below).

Eye Contact:
During heating: Thermal Burns: Signs/symptoms may include severe pain, redness and swelling, and tissue destruction.

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Dermal Effects: Signs/symptoms may include redness, itching, acne, or bumps on the skin.

Carcinogenicity:
Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Trivalent antimony	1309-64-4	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
Antimony trioxide	1309-64-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Antimony Trioxide	1309-64-4	Anticipated human carcinogen	National Toxicology Program Carcinogens

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
Ethylene-Propylene Polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg
Ethylene-Propylene Polymer	Ingestion	Rat	LD50 > 5,000 mg/kg
Brominated Flame Retardant	Dermal	Rabbit	LD50 > 2,000 mg/kg
Brominated Flame Retardant	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 51 mg/l
Brominated Flame Retardant	Ingestion	Rat	LD50 > 7,500 mg/kg
Hydrocarbon Resin (NJTS Reg. No. 04499600-7069)	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Hydrocarbon Resin (NJTS Reg. No. 04499600-7069)	Ingestion	Professional judgement	LD50 7,000 mg/kg
Styrene-Butadiene Polymer (NJTS Reg. No. 04499600-7070)	Dermal		LD50 estimated to be > 5,000 mg/kg
Styrene-Butadiene Polymer (NJTS Reg. No. 04499600-7070)	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polyethylene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyethylene	Ingestion	Rat	LD50 > 2,000 mg/kg
Antimony Trioxide	Dermal	Rabbit	LD50 > 6,685 mg/kg
Antimony Trioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.76 mg/l
Antimony Trioxide	Ingestion	Rat	LD50 > 34,600 mg/kg
Polyolefin Wax	Dermal	Rat	LD50 > 5,000 mg/kg
Polyolefin Wax	Ingestion	Rat	LD50 > 5,000 mg/kg
Polyolefin Blend	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyolefin Blend	Ingestion	Mouse	LD50 > 8,000 mg/kg
Ethylene-Propylene-Ethylidenenorbornene Terpolymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Ethylene-Propylene-Ethylidenenorbornene Terpolymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ethylene-Propylene Polymer	Rabbit	No significant irritation
Brominated Flame Retardant	Rabbit	No significant irritation
Hydrocarbon Resin (NJTS Reg. No. 04499600-7069)	Professional	No significant irritation

	judgement	
Polyethylene	Professional judgement	No significant irritation
Antimony Trioxide	Human and animal	Minimal irritation
Polyolefin Wax	Rabbit	No significant irritation
Polyolefin Blend	Human and animal	No significant irritation
Ethylene-Propylene-Ethylidenenorbornene Terpolymer	Professional judgement	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethylene-Propylene Polymer	Rabbit	No significant irritation
Brominated Flame Retardant	Rabbit	No significant irritation
Antimony Trioxide	Rabbit	Mild irritant
Polyolefin Wax	Rabbit	No significant irritation
Polyolefin Blend	Professional judgement	No significant irritation
Ethylene-Propylene-Ethylidenenorbornene Terpolymer	Professional judgement	No significant irritation

Skin Sensitization

Name	Species	Value
Antimony Trioxide	Human	Not classified
Polyolefin Wax	Guinea pig	Not classified
Polyolefin Blend	Human and animal	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
Brominated Flame Retardant	In Vitro	Not mutagenic
Hydrocarbon Resin (NJTS Reg. No. 04499600-7069)	In Vitro	Not mutagenic
Antimony Trioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Antimony Trioxide	In vivo	Some positive data exist, but the data are not sufficient for classification
Polyolefin Wax	In Vitro	Not mutagenic
Polyolefin Blend	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Polyethylene	Not Specified	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Antimony Trioxide	Inhalation	Multiple animal species	Carcinogenic
Polyolefin Wax	Ingestion	Rat	Not carcinogenic
Polyolefin Blend	Not Specified	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
Brominated Flame Retardant	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,000 mg/kg/day	during organogenesis
Antimony Trioxide	Inhalation	Not classified for female reproduction	Rat	LOAEL 0.25 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
Antimony Trioxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Brominated Flame Retardant	Ingestion	heart | endocrine system | hematopoietic system | liver | kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
Antimony Trioxide	Dermal	skin	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Antimony Trioxide	Inhalation	pulmonary fibrosis	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.002 mg/l	1 years
Antimony Trioxide	Inhalation	liver	Not classified	Rat	NOAEL 0.043 mg/l	1 years
Antimony Trioxide	Inhalation	blood	Not classified	Rat	NOAEL 0.004 mg/l	not available
Antimony Trioxide	Inhalation	pneumoconiosis	Not classified	Human	LOAEL 0.01 mg/l	occupational exposure
Antimony Trioxide	Inhalation	heart	Not classified	Rat	NOAEL 0.02 mg/l	1 years
Antimony Trioxide	Ingestion	blood | liver	Not classified	Rat	NOAEL 418 mg/kg/day	not available
Antimony Trioxide	Ingestion	heart	Not classified	Rat	NOAEL Not available	not available
Polyolefin Wax	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 15 mg/kg/day	90 days
Polyolefin Wax	Ingestion	hematopoietic system | liver | immune system | skin | endocrine system | bone, teeth, nails, and/or hair | muscles | nervous system | eyes |	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days

		kidney and/or bladder | respiratory system | vascular system				

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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate 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): D008 (Lead)

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M 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 original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. US Federal Regulations
Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards
Not applicable

Health Hazards
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

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

Ingredient	C.A.S. No	% by Wt
Antimony Trioxide (ANTIMONY COMPOUNDS)	1309-64-4	Trade Secret < 10

15.2. State Regulations
Contact 3M for more information.

15.3. Chemical Inventories
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.

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: 1 **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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