Safety Data Sheet

Document Group:	18-4802-7	**Version Number:**	3.03
Issue Date:	01/15/21	**Supercedes Date:**	04/01/09

SECTION 1: Identification

1.1. Product identifier

3M™ Scotchcal™ Translucent Graphic Films for Thermoforming

Product Identification Numbers

75-3470-5390-4, 75-3470-5396-1, 75-3470-5407-6, 75-3470-5412-6, 75-3470-5420-9, 75-3470-5421-7, 75-3470-5422-5, 75-3470-5423-3, 75-3470-5424-1, 75-3470-5425-8, 75-3470-5426-6, 75-3470-5427-4, 75-3470-5428-2, 75-3470-5429-0, 75-3470-5430-8, 75-3470-5431-6, 75-3470-5432-4, 75-3470-5433-2, 75-3470-5434-0, 75-3470-5435-7, 75-3470-5436-5, 75-3470-5437-3, 75-3470-5439-9, 75-3470-5440-7, 75-3470-5441-5, 75-3470-5468-8, 75-3470-5469-6, 75-3470-5470-4, 75-3470-5471-2, 75-3470-5472-0, 75-3470-5473-8, 75-3470-5474-6, 75-3470-5475-3, 75-3470-5476-1, 75-3470-5477-9, 75-3470-5478-7, 75-3470-5479-5, 75-3470-5480-3, 75-3470-5481-1, 75-3470-5482-9, 75-3470-5483-7, 75-3470-5484-5, 75-3470-5485-2, 75-3470-5486-0, 75-3470-5487-8, 75-3470-5488-6, 75-3470-5489-4, 75-3470-5490-2, 75-3470-5491-0, 75-3470-5492-8, 75-3470-5493-6, 75-3470-5494-4, 75-3470-5495-1, 75-3470-5496-9, 75-3470-5497-7, 75-3470-5498-5, 75-3470-5499-3, 75-3470-5630-3, 75-3470-5631-1, 75-3470-5632-9, 75-3470-5633-7, 75-3470-5634-5, 75-3470-5635-2, 75-3470-5636-0, 75-3470-5637-8, 75-3470-5638-6, 75-3470-5639-4, 75-3470-5641-0, 75-3470-5642-8, 75-3470-5643-6, 75-3470-5644-4, 75-3470-5646-9, 75-3470-5648-5, 75-3470-5649-3, 75-3470-5650-1, 75-3470-5651-9, 75-3470-5652-7, 75-3470-5653-5, 75-3470-5654-3, 75-3470-5655-0, 75-3470-5656-8, 75-3470-5657-6, 75-3470-5658-4, 75-3470-5659-2, 75-3470-5660-0, 75-3470-5661-8, 75-3470-5662-6, 75-3470-5663-4, 75-3470-5664-2, 75-3470-5665-9, 75-3470-5666-7, 75-3470-5667-5, 75-3470-5668-3, 75-3470-5669-1, 75-3470-5670-9, 75-3470-5671-7, 75-3470-5672-5, 75-3470-5673-3, 75-3470-5674-1, 75-3470-5675-8, 75-3470-5676-6, 75-3470-5677-4, 75-3470-5678-2, 75-3470-5679-0, 75-3470-5680-8, 75-3470-5681-6, 75-3470-5682-4, 75-3470-5683-2, 75-3470-5684-0, 75-3470-5685-7, 75-3470-5686-5, 75-3470-5687-3, 75-3470-5688-1, 75-3470-5689-9, 75-3470-5690-7, 75-3470-5692-3, 75-3470-5693-1, 75-3470-5694-9, 75-3470-5695-6, 75-3470-5696-4, 75-3470-5697-2, 75-3470-5698-0, 75-3470-5699-8, 75-3470-5700-4, 75-3470-5701-2, 75-3470-5702-0, 75-3470-5703-8, 75-3470-5704-6, 75-3470-5705-3, 75-3470-5706-1, 75-3470-5707-9, 75-3470-5786-3, 75-3470-5787-1, 75-3470-5788-9, 75-3470-5789-7, 75-3470-5790-5, 75-3470-5791-3, 75-3470-5792-1, 75-3470-5793-9, 75-3470-5794-7, 75-3470-5795-4, 75-3470-5796-2, 75-3470-5797-0, 75-3470-5798-8, 75-3470-5799-6, 75-3470-5801-0, 75-3470-5802-8, 75-3470-5803-6, 75-3470-5804-4, 75-3470-5805-1, 75-3470-5806-9, 75-3470-5807-7, 75-3470-5808-5, 75-3470-5809-3, 75-3470-5810-1, 75-3470-5811-9, 75-3470-5812-7, 75-3470-5813-5, 75-3470-5814-3, 75-3470-5815-0, 75-3470-5816-8, 75-3470-5817-6, 75-3470-5818-4, 75-3470-5819-2, 75-3470-5820-0, 75-3470-5821-8, 75-3470-5822-6, 75-3470-5823-4, 75-3470-5824-2, 75-3470-5825-9, 75-3470-5827-5, 75-3470-5828-3
7010391854, 7000030940, 7010347090, 7010391856, 7100120661, 7100044716, 7100012905, 7100063319, 7100063392

1.2. Recommended use and restrictions on use

Recommended use

Thermoforming Film

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Commercial Solutions 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
Reproductive Toxicity: Category 1B.
Carcinogenicity: Category 1A.

2.2. Label elements
Signal word
Danger

Symbols
Health Hazard |

Pictograms

Hazard Statements
May damage fertility or the unborn child.
May cause cancer.

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves.

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:
May cause thermal burns. The health hazards of this material are not completely known. See the SDS.

100% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt

PVC FILM	Trade Secret*	70 - 90 Trade Secret *
ACRYLIC ADHESIVE	Trade Secret*	10 - 30 Trade Secret *
CARBON BLACK	1333-86-4	< 1 Trade Secret *
LEAD CHROMATE	7758-97-6	< 1 Trade Secret *

*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
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 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
Chlorine	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	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. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Observe precautions from other sections. 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
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
CARBON BLACK	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
CARBON BLACK	1333-86-4	OSHA	TWA:3.5 mg/m3	
LEAD CHROMATE	7758-97-6	ACGIH	TWA(as Cr(IV), inhalable fraction):0.0002 mg/m3;STEL(as Cr(IV), inhalable fraction):0.0005 mg/m3	A1: Confirmed human carcin., Dermal/Respiratory Sensitizer
LEAD, INORGANIC COMPOUNDS	7758-97-6	OSHA	TWA:0.05 mg/m3	29 CFR 1910.1025

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:
Full Face Shield
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

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 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	White
Specific Physical Form:	Film
Odor	Odorless
Odor threshold	*Not Applicable*
pH	*Not Applicable*
Melting point	*No Data Available*
Boiling Point	*Not Applicable*
Flash Point	*Not Applicable*
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*Not Applicable*
Vapor Density	*Not Applicable*
Density	*Not Applicable*
Specific Gravity	*Not Applicable*
Solubility in Water	Nil
Solubility- non-water	*Not Applicable*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*Not Applicable*
Viscosity	*No Data Available*
Volatile Organic Compounds	*Not Applicable*
VOC Less H2O & Exempt Solvents	*Not Applicable*

SECTION 10: Stability and reactivity

10.1. Reactivity
This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products

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.

Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:
No information available. May cause additional health effects (see below).

Additional Health Effects:

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	7758-97-6	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
CR 6 CMPDS	7758-97-6	Known human carcinogen	National Toxicology Program Carcinogens
CR 6 CMPDS	7758-97-6	Cancer hazard	OSHA Carcinogens
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:
The health hazards of this material are not completely known. Conservative safe handling measures should be followed (as described in sections 7 and 8), and appropriate first aid measures (as described in section 4) should be taken if exposure occurs.

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
LEAD CHROMATE	Dermal		LD50 estimated to be > 5,000 mg/kg
CARBON BLACK	Dermal	Rabbit	LD50 > 3,000 mg/kg
CARBON BLACK	Ingestion	Rat	LD50 > 8,000 mg/kg
LEAD CHROMATE	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
CARBON BLACK	Rabbit	No significant irritation
LEAD CHROMATE	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
CARBON BLACK	Rabbit	No significant irritation
LEAD CHROMATE	Rabbit	No significant irritation

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

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

CARBON BLACK	In Vitro	Not mutagenic
CARBON BLACK	In vivo	Some positive data exist, but the data are not sufficient for classification
LEAD CHROMATE	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
CARBON BLACK	Dermal	Mouse	Not carcinogenic
CARBON BLACK	Ingestion	Mouse	Not carcinogenic
CARBON BLACK	Inhalation	Rat	Carcinogenic
LEAD CHROMATE	Not Specified	similar compounds	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
LEAD CHROMATE	Not Specified	Toxic to female reproduction	similar compounds	NOAEL Not available	
LEAD CHROMATE	Not Specified	Toxic to male reproduction	similar compounds	NOAEL Not available	
LEAD CHROMATE	Not Specified	Toxic to development	similar compounds	NOAEL Not available	

Target Organ(s)

Specific Target Organ Toxicity - single exposure
For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CARBON BLACK	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
LEAD CHROMATE	Ingestion	hematopoietic system | central nervous system | kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Dog	LOAEL 50 mg/kg/day	90 days
LEAD CHROMATE	Ingestion	liver	Not classified	Rat	NOAEL 2,000 mg/kg/day	90 days
LEAD CHROMATE	Ingestion	heart	Not classified	Dog	NOAEL 500 mg/kg/day	90 days
LEAD CHROMATE	Ingestion	endocrine system | immune system | respiratory system	Not classified	Rat	NOAEL 2,000 mg/kg/day	90 days

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.

EPA Hazardous Waste Number (RCRA): D007 (Chromium), D008 (Lead)

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.

EPCRA 311/312 Hazard Classifications:

Physical Hazards
Not applicable

Health Hazards
Carcinogenicity
Reproductive toxicity

15.2. State Regulations
Contact 3M for more information.

15.3. Chemical Inventories
This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

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.

Document Group:	18-4802-7	**Version Number:**	3.03
Issue Date:	01/15/21	**Supercedes Date:**	04/01/09

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

3M USA SDSs are available at www.3M.com