

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M(TM) Scotchlite(TM) Transparent Screen Printing Ink 2917 Brown

Product Identification Numbers

75-0300-8818-3

1.2. Recommended use and restrictions on use

Recommended use

Screen Printing Ink

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

Flammable Liquid: Category 3.

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1A.

Reproductive Toxicity: Category 1B.

Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

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Pictograms







Hazard Statements

Flammable liquid and vapor.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

May damage fertility or the unborn child.

Precautionary Statements

Prevention:

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves and eye/face protection.

Wash thoroughly after handling.

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

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

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

Storage:

Keep cool.

Keep container tightly closed.

Store locked up in a well-ventilated place.

Disposal:

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

SECTION 3: Composition/information on ingredients

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Ingredient	C.A.S. No.	% by Wt
CYCLOHEXANONE	108-94-1	30 - 40 Trade Secret *
1-METHOXY-2-PROPYL ACETATE	108-65-6	15 - 25 Trade Secret *
ETHYL 3-ETHOXYPROPIONATE	763-69-9	10 - 20 Trade Secret *
VINYL ACETATE-VINYL ALCOHOL-VINYL	Trade Secret*	10 - 20 Trade Secret *
CHLORIDE POLYMER		
ETHYL ACRYLATE-METHYL METHACRYLATE	9010-88-2	5 - 10 Trade Secret *
POLYMER		
ORGANIC PIGMENT (NJTSR# 04499600-5248P)	Trade Secret*	1 - 10 Trade Secret *
POLYMERIC PLASTICIZER	Trade Secret*	3 - 7 Trade Secret *
Epoxy Soybean Oil	8013-07-8	1 - 5 Trade Secret *
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4-	2386-87-0	< 1.0 Trade Secret *
EPOXYCYCLOHEXANECARBOXYLATE		
2-METHOXY-1-PROPYL ACETATE	70657-70-4	< 0.5 Trade Secret *
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	41556-26-7	< 0.5 Trade Secret *
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	64742-94-5	< 0.5 Trade Secret *
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	104810-48-2	< 0.5 Trade Secret *
Polymeric Benzotriazole	104810-47-1	< 0.5 Trade Secret *
ISODECYL DIPHENYL PHOSPHITE	Trade Secret*	< 0.5 Trade Secret *
BARIUM NONYLPHENOATE	28987-17-9	< 0.1 Trade Secret *
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	82919-37-7	< 0.1 Trade Secret *
Triphenyl Phosphite	Trade Secret*	< 0.1 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

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.

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^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

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.

Hazardous Decomposition or By-Products

<u>Substance</u>	Condition
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion
Oxides of Nitrogen	During Combustion

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 designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam 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 detergent and water. 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 or professional use only. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing

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before reuse. 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.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight. Store away from heat. 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
1-METHOXY-2-PROPYL	108-65-6	AIHA	TWA:50 ppm	
ACETATE				
CYCLOHEXANONE	108-94-1	OSHA	TWA:200 mg/m3(50 ppm)	
CYCLOHEXANONE	108-94-1	ACGIH	TWA:20 ppm;STEL:50 ppm	A3: Confirmed animal
				carcin., SKIN
BARIUM, SOLUBLE	28987-17-9	OSHA	TWA(as Ba):0.5 mg/m3	
COMPOUNDS				
BARIUM, SOLUBLE	28987-17-9	ACGIH	TWA(as Ba):0.5 mg/m3	A4: Not class. as human
COMPOUNDS				carcin
Naphtha	64742-94-5	OSHA	TWA:400 mg/m3(100 ppm)	
Kerosine (petroleum)	64742-94-5	ACGIH	TWA(as total hydrocarbon	A3: Confirmed animal
- ,			vapor, non-aerosol):200	carcin., SKIN
			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. 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

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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: Solvent odor, Brown Color

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNot Applicable

Boiling Point Not Applicable >=284 °F

Flash Point 113 °F [Test Method:Closed Cup]

Evaporation rateFlammability (solid, gas)
No Data Available
Not Applicable

Flammable Limits(LEL) 1 %
Flammable Limits(UEL) 8.7 %

 Vapor Pressure
 <=3.7 mmHg [@ 20 °C]</td>

 Vapor Density
 > 1 [Ref Std: AIR=1]

Density 1.07 g/ml

Specific Gravity 1.07 [Ref Std: WATER=1]

Solubility in WaterModerateSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data Available

Autoignition temperature > 670 °F

Decomposition temperatureNo Data AvailableViscosityNo Data Available

Volatile Organic Compounds
723 g/l [Details: As manufactured]
Volatile Organic Compounds
803 g/l [Details: After maximum thinning]

Percent volatile 60 - 70 %

VOC Less H2O & Exempt Solvents 723 g/l [Details: As manufactured]

VOC Less H2O & Exempt Solvents 803 g/l [Details: After maximum thinning]

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

Sparks and/or flames

10.5. Incompatible materials

Strong oxidizing agents

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:

May be harmful if inhaled.

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:

May be harmful in contact with skin.

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:

May be harmful if swallowed.

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

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May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Reproductive/Developmental Toxicity:

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

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 ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
CYCLOHEXANONE	Dermal	Rabbit	LD50 >794, <3160 mg/kg
CYCLOHEXANONE	Inhalation- Vapor (4 hours)	Rat	LC50 > 6.2 mg/l
CYCLOHEXANONE	Ingestion	Rat	LD50 1,296 mg/kg
1-METHOXY-2-PROPYL ACETATE	Dermal	Rabbit	LD50 > 5,000 mg/kg
1-METHOXY-2-PROPYL ACETATE	Inhalation- Vapor (4 hours)	Rat	LC50 > 28.8 mg/l
1-METHOXY-2-PROPYL ACETATE	Ingestion	Rat	LD50 8,532 mg/kg
VINYL ACETATE-VINYL ALCOHOL-VINYL CHLORIDE POLYMER	Dermal	Rabbit	LD50 > 8,000 mg/kg
VINYL ACETATE-VINYL ALCOHOL-VINYL CHLORIDE POLYMER	Ingestion	Rat	LD50 > 8,000 mg/kg
ETHYL 3-ETHOXYPROPIONATE	Dermal	Rabbit	LD50 4,080 mg/kg
ETHYL 3-ETHOXYPROPIONATE	Inhalation- Vapor (4 hours)	Rat	LC50 > 14.4 mg/l
ETHYL 3-ETHOXYPROPIONATE	Ingestion	Rat	LD50 3,200 mg/kg
ORGANIC PIGMENT (NJTSR# 04499600-5248P)	Dermal		LD50 estimated to be > 5,000 mg/kg
ORGANIC PIGMENT (NJTSR# 04499600-5248P)	Ingestion	Rat	LD50 > 10,000 mg/kg
ETHYL ACRYLATE-METHYL METHACRYLATE POLYMER	Dermal		LD50 estimated to be > 5,000 mg/kg
ETHYL ACRYLATE-METHYL METHACRYLATE POLYMER	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Epoxy Soybean Oil	Dermal	Rabbit	LD50 > 20,000 mg/kg
Epoxy Soybean Oil	Ingestion	Rat	LD50 > 5,000 mg/kg
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLATE	Dermal	Rabbit	LD50 > 23,400 mg/kg
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLATE	Ingestion	Rat	LD50 5,000 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	Dermal	Rat	LD50 > 2,000 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.8 mg/l
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	Ingestion	Rat	LD50 > 5,000 mg/kg
Polymeric Benzotriazole	Dermal	Rat	LD50 > 2,000 mg/kg

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) Scotchlite(TM) Transparent Screen Pr	rinting Ink 2917 Brown
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Polymeric Benzotriazole	Inhalation-	Rat	LC50 > 5.8 mg/l
1 orymene Benzourazore	Dust/Mist	Teat	2000 - 3.0 mg r
	(4 hours)		
Polymeric Benzotriazole	Ingestion	Rat	LD50 > 5,000 mg/kg
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Dermal	Rabbit	LD50 > 2,000 mg/kg
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
ISODECYL DIPHENYL PHOSPHITE	Dermal	Rabbit	LD50 > 5,000 mg/kg
ISODECYL DIPHENYL PHOSPHITE	Inhalation-	Rat	LC50 > 2.1 mg/l
	Dust/Mist		
	(4 hours)		
ISODECYL DIPHENYL PHOSPHITE	Ingestion	Rat	LD50 3,840 mg/kg
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Ingestion	Rat	LD50 3,125 mg/kg
2-METHOXY-1-PROPYL ACETATE	Dermal	Rabbit	LD50 > 2,000 mg/kg
2-METHOXY-1-PROPYL ACETATE	Ingestion	Rat	LD50 > 5,000 mg/kg
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	Ingestion	Rat	LD50 3,125 mg/kg
Triphenyl Phosphite	Dermal	Rabbit	LD50 > 2,000 mg/kg
Triphenyl Phosphite	Inhalation-	Rat	LC50 > 1.7 mg/l
	Dust/Mist		
	(4 hours)		
Triphenyl Phosphite	Ingestion	Rat	LD50 1,590 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
CYCLOHEXANONE	Rabbit	Irritant
1-METHOXY-2-PROPYL ACETATE	Rabbit	No significant irritation
VINYL ACETATE-VINYL ALCOHOL-VINYL CHLORIDE POLYMER	Professio	No significant irritation
	nal	
	judgeme	
	nt	
ETHYL 3-ETHOXYPROPIONATE	Rabbit	No significant irritation
ETHYL ACRYLATE-METHYL METHACRYLATE POLYMER	Professio	No significant irritation
	nal	
	judgeme	
	nt	27
Epoxy Soybean Oil	Rabbit	No significant irritation
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4-	Rabbit	Minimal irritation
EPOXYCYCLOHEXANECARBOXYLATE		
Poly(oxy-1,2-ethanediyl), alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-	Rabbit	No significant irritation
dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-		
Polymeric Benzotriazole	Rabbit	No significant irritation
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Irritant
ISODECYL DIPHENYL PHOSPHITE	Rabbit	No significant irritation
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Rabbit	No significant irritation
2-METHOXY-1-PROPYL ACETATE	Rabbit	No significant irritation
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	Rabbit	No significant irritation
Triphenyl Phosphite	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
CYCLOHEXANONE	Rabbit	Severe irritant
1-METHOXY-2-PROPYL ACETATE	Rabbit	Mild irritant
VINYL ACETATE-VINYL ALCOHOL-VINYL CHLORIDE POLYMER	Professio	No significant irritation
	nal	
	judgeme	
	nt	
ETHYL 3-ETHOXYPROPIONATE	Rabbit	Mild irritant
ETHYL ACRYLATE-METHYL METHACRYLATE POLYMER	Professio	No significant irritation

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Epoxy Soybean Oil	Rabbit	No significant irritation
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLATE	Rabbit	Mild irritant
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	Rabbit	No significant irritation
Polymeric Benzotriazole	Rabbit	No significant irritation
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Rabbit	Mild irritant
ISODECYL DIPHENYL PHOSPHITE	Rabbit	No significant irritation
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Rabbit	No significant irritation
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	Rabbit	No significant irritation
Triphenyl Phosphite	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
CYCLOHEXANONE	Guinea	Not classified
	pig	
1-METHOXY-2-PROPYL ACETATE	Guinea	Not classified
	pig	
ETHYL 3-ETHOXYPROPIONATE	Guinea	Not classified
	pig	
Epoxy Soybean Oil	Guinea	Not classified
	pig	
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4-	Guinea	Sensitizing
EPOXYCYCLOHEXANECARBOXYLATE	pig	
Poly(oxy-1,2-ethanediyl), .alpha[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-	Guinea	Sensitizing
dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]omegahydroxy-	pig	
Polymeric Benzotriazole	Guinea	Sensitizing
	pig	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Guinea	Not classified
	pig	
ISODECYL DIPHENYL PHOSPHITE	Multiple	Sensitizing
	animal	
	species	
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	Guinea	Sensitizing
	pig	
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	Guinea	Sensitizing
	pig	
Triphenyl Phosphite	Mouse	Sensitizing

Respiratory SensitizationFor the components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
CYCLOHEXANONE	In vivo	Not mutagenic
CYCLOHEXANONE	In Vitro	Some positive data exist, but the data are not sufficient for classification
1-METHOXY-2-PROPYL ACETATE	In Vitro	Not mutagenic
ETHYL 3-ETHOXYPROPIONATE	In Vitro	Not mutagenic
Epoxy Soybean Oil	In Vitro	Not mutagenic
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLATE	In vivo	Not mutagenic
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLATE	In Vitro	Some positive data exist, but the data are not sufficient for classification
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	In Vitro	Not mutagenic
METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL SEBACATE	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
CYCLOHEXANONE	Ingestion	Multiple	Some positive data exist, but the data are not

3M(TM) Scotchlite((TM)	Trans	parent	Screen	Printing	Ink 291'	7 Brown

		animal	sufficient for classification
		species	
Epoxy Soybean Oil	Ingestion	Rat	Not carcinogenic
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4-	Dermal	Mouse	Not carcinogenic
EPOXYCYCLOHEXANECARBOXYLATE			-
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Dermal	Mouse	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
CYCLOHEXANONE	Inhalation	Not classified for female reproduction	Rat	NOAEL 4 mg/l	2 generation
CYCLOHEXANONE	Inhalation	Not classified for male reproduction	Rat	NOAEL 2 mg/l	2 generation
CYCLOHEXANONE	Ingestion	Not classified for development	Mouse	LOAEL 1,100 mg/kg/day	during organogenesi s
CYCLOHEXANONE	Inhalation	Not classified for development	Rat	NOAEL 2 mg/l	2 generation
1-METHOXY-2-PROPYL ACETATE	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-METHOXY-2-PROPYL ACETATE	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-METHOXY-2-PROPYL ACETATE	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
1-METHOXY-2-PROPYL ACETATE	Inhalation	Not classified for development	Rat	NOAEL 21.6 mg/l	during organogenesi s
Epoxy Soybean Oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
Epoxy Soybean Oil	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
Epoxy Soybean Oil	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	1 generation
(3',4'-EPOXYCYCLOHEXYLMETHYL) 3,4- EPOXYCYCLOHEXANECARBOXYLAT E	Ingestion	Not classified for development	Rat	NOAEL 125 mg/kg/day	during gestation
2-METHOXY-1-PROPYL ACETATE	Dermal	Not classified for development	Rabbit	NOAEL 2,000 mg/kg/day	during organogenesi s
2-METHOXY-1-PROPYL ACETATE	Inhalation	Toxic to development	Rabbit	NOAEL 0.8 mg/l	during organogenesi s

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CYCLOHEXANONE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Guinea pig	LOAEL 16.1 mg/l	6 hours
CYCLOHEXANONE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
CYCLOHEXANONE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	

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1-METHOXY-2-PROPYL ACETATE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professio nal judgeme nt	NOAEL Not available	
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professio nal judgeme nt	NOAEL Not available	
2-METHOXY-1-PROPYL ACETATE	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
2-METHOXY-1-PROPYL ACETATE	Ingestion	central nervous system depression	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 5,000 mg/kg	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CYCLOHEXANONE	Inhalation	liver kidney and/or bladder	Not classified	Rabbit	NOAEL 0.76 mg/l	50 days
CYCLOHEXANONE	Ingestion	liver	Not classified	Mouse	NOAEL 4,800 mg/kg/day	90 days
1-METHOXY-2-PROPYL ACETATE	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 16.2 mg/l	9 days
1-METHOXY-2-PROPYL ACETATE	Inhalation	olfactory system	Not classified	Mouse	LOAEL 1.62 mg/l	9 days
1-METHOXY-2-PROPYL ACETATE	Inhalation	blood	Not classified	Multiple animal species	NOAEL 16.2 mg/l	9 days
1-METHOXY-2-PROPYL ACETATE	Ingestion	endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	44 days
ETHYL 3- ETHOXYPROPIONATE	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 6 mg/l	90 days
ETHYL 3- ETHOXYPROPIONATE	Inhalation	nervous system heart liver immune system kidney and/or bladder	Not classified	Rat	NOAEL 6 mg/l	17 days
ETHYL 3- ETHOXYPROPIONATE	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	17 days
ETHYL 3- ETHOXYPROPIONATE	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
ETHYL 3- ETHOXYPROPIONATE	Ingestion	kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	17 days
Epoxy Soybean Oil	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 1,250 mg/kg/day	2 years
(3',4'- EPOXYCYCLOHEXYLM ETHYL) 3,4- EPOXYCYCLOHEXANE CARBOXYLATE	Ingestion	olfactory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 5 mg/kg/day	90 days
(3',4'- EPOXYCYCLOHEXYLM ETHYL) 3,4- EPOXYCYCLOHEXANE	Ingestion	liver kidney and/or bladder hematopoietic system	Not classified	Rat	NOAEL 500 mg/kg/day	90 days

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CARBOXYLATE						
(3',4'- EPOXYCYCLOHEXYLM ETHYL) 3,4- EPOXYCYCLOHEXANE CARBOXYLATE	Ingestion	endocrine system respiratory system	Not classified	Rat	NOAEL 1,113 mg/kg/day	14 days
2-METHOXY-1-PROPYL ACETATE	Inhalation	immune system bone marrow	Not classified	Rat	NOAEL 15.4 mg/l	28 days
2-METHOXY-1-PROPYL ACETATE	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 2,600 mg/kg/day	2 weeks
Triphenyl Phosphite	Ingestion	nervous system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	28 days

Aspiration Hazard

Name	Value
HEAVY AROMATIC SOLVENT NAPHTHA (PETROLEUM)	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

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.

Incinerate in a permitted waste incineration facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, utilize an acceptable permitted waste disposal 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.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D005 (Barium), D018 (Benzene)

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.

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EPCRA 311/312 Hazard Classifications:

Physical Hazards	
Flammable (gases, aerosols, liquids, or solids)	

Health Hazards	
Reproductive toxicity	
Respiratory or Skin Sensitization	
Serious eye damage or eye irritation	
Skin Corrosion or Irritation	
Specific target organ toxicity (single or repeated exposure)	

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	Listing
Benzene	71-43-2	Male reproductive toxin
Benzene	71-43-2	Carcinogen
Benzene	71-43-2	Developmental Toxin
Cadmium	7440-43-9	Male reproductive toxin
Cadmium	7440-43-9	Carcinogen
Cadmium	7440-43-9	Developmental Toxin
Lead	7439-92-1	Female reproductive toxin
Lead	7439-92-1	Male reproductive toxin
Lead	7439-92-1	Carcinogen
Lead	7439-92-1	Developmental Toxin

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: 2 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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