

PRODUCTS INC. 3811 CURTIS AVENUE BALTIMORE, MARYLAND 21226-1131 410-354-8600 800-637-6372 www.kaufman products.net

Version: 1.0

Thinfilm 456 (456)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 04/14/2023 Supersedes: 04/14/2021

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier

Product Form: Mixture

Product Name: Thinfilm 456 (456)

1.2. Intended Use of the Product

Use of the substance/mixture: Curing compound

1.3. Name, Address, and Telephone of the Responsible Party

Company

Kaufman Products, Inc. 3811 Curtis Avenue Baltimore. MD 21226-1131

Baitimore, MD 21226-113

410-354-8600

http://www.kaufmanproducts.net/

1.4. Emergency Telephone Number Emergency Number : 800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Skin Sens. 1 H317 STOT SE 1 H370 Aquatic Acute 2 H401 Aquatic Chronic 2 H411

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS07

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H351 - Supported of sausing capson.

H351 - Suspected of causing cancer. H370 - Causes damage to organs H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects P201 - Obtain special instructions before use

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe mist, spray, vapors

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P261 - Avoid breathing mist, spray, vapors

P264 - Wash exposed areas. thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P272 - Contaminated work clothing should not be allowed out of the workplace

P273 - Avoid release to the environment

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P308+P313 - If exposed or concerned: Get medical advice/attention

P321 - Specific treatment (see Section 4)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

P362+P364 - Take off contaminated clothing and wash it before reuse

P391 - Collect spillage

P405 - Store locked up

P501 - Dispose of contents/container to local, regional, national, and international regulations

2.3. Other Hazards

No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Water	(CAS No) 7732-18-5	30-60	Not classified
Poly-Alpha-Methyl-Styrene (PAMS) Resin	(CAS No) 68131-99-7	10-40	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Solvent naphtha (petroleum), light arom.	(CAS No) 64742-95-6	7-13	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Carcinogen 2, H351 Asp. Tox. 1, H304
Titanium Dioxide	(CAS No) 13463-67-7	5-7	Comb. Dust H232

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Get medical advice/attention. Wash contaminated clothing before reuse.



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First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

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

Symptoms/Injuries: May cause an allergic skin reaction.

Symptoms/Injuries After Inhalation: Inhalation of fumes or vapours may cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer. Causes damage to organs through prolonged or repeated exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Product is stable.5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid all eyes and skin contact and do not breathe vapor and mist. Do not allow product to spread into the environment.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Collect spillage. Clear up spills immediately and dispose of waste safely.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: 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. Avoid breathing vapours, mist, spray.





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Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep container tightly

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Incompatible Materials: Heat sources.

Storage Area: Store locked up.

7.3. Specific End Use(s) Pigmented Curing compound

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Hydrocarbon Resin 68131-87-3		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	50 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	75 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

8.2. Exposure Controls

Appropriate Engineering Controls : Ensure all national/local regulations are observed.

Personal Protective Equipment : Gloves. Protective clothing. In case of splash hazard: safety glasses.







Materials for Protective Clothing: Chemically resistant materials and fabrics.Hand Protection: Wear chemically resistant protective gloves.

Eye Protection : In case of splash hazard: chemical goggles or safety glasses.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, NIOSH approved

respiratory protection should be worn.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: LiquidAppearance: Milky white.Odor: Distinctive.

Odor Threshold: No data availablepH: No data availableRelative Evaporation Rate (butylacetate=1): No data available



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Relative evaporation rate (ether=1) : Slower than ether **Melting Point** : No data available **Freezing Point** : No data available : 100 °C (212 °F) **Boiling Point Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : No data available Vapor Pressure : No data available Relative Vapor Density at 20 °C : Heavier than air **Relative Density** : No data available

Specific Gravity : 1.02

Solubility : Water: Partial. Dilution will reduce stability

Log Pow: No data availableLog Kow: No data availableViscosity, Kinematic: No data availableViscosity, Dynamic: No data availableExplosive Properties: No data availableOxidizing Properties: No data availableExplosive Limits: Not applicable

9.2. Other Information

VOC content : < 251 g/l

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity: Product is stable.
- 10.2 Chemical Stability: Product is stable.
- **10.3** Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4 Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.
- 10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.
- 10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Titanium dioxide (13463-67-7)	
LD50 Oral Rat	>10000 mg/kg

Solvent naphtha (petroleum), light aroatic (64742-95-6)

Skin Corrosion/Irritation: Irritating to skin.
Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

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Carcinogenicity: Possibly carcinogenic to humans.

Solvent naphtha (petroleum), light aroatic (64742-95-6)	
IARC	Group 2B: Possibly carcinogenic to humans

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Central nervous system.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of fumes or vapours may cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer. Causes damage to organs through prolonged or repeated exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Toxic to aquatic life with long lasting effects.

Solvent naphtha (petroleum), light aroatic (64742-95-6)		
LC50 Fish 1	10 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)	
EC50 Daphnia 1	4.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
EC50 Other Aquatic Organisms 1	3.71 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)	

12.2. Persistence and Degradability

Thinfilm 456 (456)	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

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Bioaccumulative Potential	Not established.	

Solvent naphtha (petroleum), light aroatic (64742-95-6)	
BCF fish 1	(low bioaccumulation expected)

- **12.4. Mobility in Soil** No additional information available
- 12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

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Solvent naphtha (petroleum), light aroatic (64742-95-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Solvent naphtha (petroleum), light aroatic (64742-95-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - New Jersey - Special Health Hazards Substances List

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: OTHER INFORMATION

Other Information : This documer

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin

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H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H370	Causes damage to organs
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

LIMITED WARRANTY

We warrant our products to be of good quality and will replace material proved detective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, Kaufman Products, Inc makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc shall have no other liability with respect hereto. User shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salespeople, distributors, and their salespeople have no authority to change the printed recommendations concerning the use of our products.

DISCLAIMER

The information provided in this Safety Data Sheet is believed to be accurate to the best of our knowledge, information, and belief at the date of its publication. The information given is designed solely as a guide for the safe handling, use, processing, storage, transportation, disposal, and release by a person trained in chemical handling. This is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified on either the latest version of our product data sheet or safety data sheet. Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.

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