



SAFETY DATA SHEET

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

1.1 Product identifier

Product Name Retro Industries Alkyd Thermoplastic Yellow

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use(s) Road safety markings

1.3 Details of the supplier of the safety data sheet

Company Identification Retro Industries, LLC
PO Box 4368
Chattanooga, TN 37405
USA Telephone +1 423-443-8678
E-Mail (competent person) mark@retroind.com

1.4 Emergency telephone number

Emergency Phone No. Retro Industries, LLC +1 423-443-8678

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification Skin Sens. 1B

2.2 Label elements

Hazard pictogram(s)

Signal word(s) Warning

Hazard statement(s) H317: May cause an allergic skin reaction.

Precautionary statement(s) P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash (hands and exposed skin) thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.



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P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.

2.3 Other hazards Molten material can cause severe burns.

SECTION 3: COMPOSITION/INFORMATION ON

Ingredient(s)	%W/W	CAS No.	EINECS No. / REACH Registration	Hazard symbol(s) and hazard statement(s)
Calcium carbonate	35-60	1317-65-3	2152796	
Titanium dioxide	<5	13463-67-7	2366755	
Glass oxide; Glass	30-50	65997-17-3		
Proprietary Resin	10-20			
Yellow Pigment	<1.5			

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. If symptoms persist, obtain medical attention.

Skin Contact Molten material can cause severe burns. Do NOT try to peel molten material from the skin. Cool rapidly with water. If symptoms occur obtain medical attention.

Inhalation In case of accident by inhalation: remove casualty to fresh air and keep at rest. If symptoms develop, obtain medical attention.

Ingestion Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed The molten form can cause thermal burns if in contact with skin or eyes.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing Media Extinguish preferably with dry chemical, sand, foam or carbon dioxide.
Unsuitable extinguishing Media None known.

5.2 Special hazards arising from the substance or mixture. Avoid direct contact with water to avoid splattering of molten plastic

5.3 Advice for fire-fighters Use appropriate Personal Protective Equipment (PPE). See Section: 8



SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Wear suitable protective clothing. Wear eye/face protection.
- 6.2 Environmental precautions Not applicable.
- 6.3 Methods and materials for containment and cleaning up Carefully shovel or sweep up spilled material and place in suitable container.
- 6.4 Reference to other sections Not applicable.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling Avoid contact with heated or molten product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place. Avoid generation of dust. Dust at sufficient concentrations can form explosive mixtures in air.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed and dry.
- 7.3 Specific end use(s) Minimize dust generation and accumulation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

SUBSTANCE.	Occupational Exposure Limits
Calcium carbonate	OSHA PEL TWA (Respirable): 5 mg/m3 OSHA PEL TWA (Total Dust): 15 mg/m3 NIOSH TWA (Total Dust): 10 mg/m3
Titanium dioxide	OSHA PEL TWA (Total Dust): 15 mg/m3 NIOSH TWA (Total Dust): 10 mg/m3

8.2 Exposure controls

- 8.2.1 Appropriate engineering controls Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.
- 8.2.2 Personal Protection Wear suitable respiratory protective equipment if working in confined spaces



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Respiratory protection	with inadequate ventilation or where there is any risk of the exposure limits being exceeded.
Eye/face protection	Safety spectacles ; Eye goggles covered with a face shield when handling molten product.
Skin protection	Wear suitable protective clothing and gloves. When dealing with heated material: Wear insulating gloves EN407 (heat).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Granular/Powdered. White.
Odor	alkyd oil
Odor Threshold (ppm)	Not applicable.
pH (Value)	Not applicable.
Freezing Point (°C)	Not applicable.
Melting Point (°C)	93
Boiling Point (°C)	Not applicable.
Flash Point (°C) [Closed cup]	>246
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-combustible.
Vapor pressure (Pascal)	
Vapor Density (Air=1)	Not applicable.
Solubility (Water)	Insoluble.
Partition Coefficient	Not applicable.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	Not applicable.
Viscosity (mPa. s)	Not applicable.
Explosive properties	Not applicable.
Oxidizing Properties	Not applicable.

9.2 Other information Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal temperature conditions and recommended use.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions.	Not applicable
10.4 Conditions to avoid	Avoid temperatures above 500°F



10.5 Incompatible materials	Acids, alum, ammonium salts, mercury, hydrogen, fluorine, magnesium
10.6 Hazardous decomposition product(s)	Carbon monoxide, Carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	
Ingestion	Harmful by ingestion.
Inhalation	Dusts and vapors or fumes evolved during thermal processing may cause irritation to the respiratory system. May cause irritation to the respiratory system.
Skin Contact	Molten material will adhere to the skin causing deep thermal burns.
Eye Contact	The molten form can cause thermal burns if in contact with eyes.
Sensitization	Resin compound may cause sensitization by skin contact. Mutagenicity No data available on mixture.
Carcinogenicity	No data.
Reproductive toxicity	No data.
STOT - single exposure	No data available on mixture.
STOT - repeated exposure	No data available on mixture.
Aspiration hazard	No data available on mixture.
Other information	No data available on mixture.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	No data.
12.2 Persistence and degradability	No data.
12.3 Bioaccumulative potential	No data available on mixture.
12.4 Mobility in soil	No data available on mixture.
12.5 Results of PBT and vPvB assessment.	Not classified as PBT or vPvB
12.6 Other adverse effects	Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Disposal should be in accordance with local, state or national legislation.
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SECTION 14: TRANSPORT INFORMATION

14.2 Proper Shipping Name	NOT CLASSED AS DANGEROUS FOR TRANSPORT.
14.3 Transport hazard class(es)	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable. Unsuitable containers: Aluminium
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
TSCA Inventory Status: Reported/Included.

SECTION 16: OTHER INFORMATION

This SDS was last reviewed: 01/2021

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