

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: KOVA Slide 10

Product Code: 87144, 87144E, 87144F, 87157, 87157E, 87146, 87146E

1.2. Intended Use of the Product

Use of the Substance/Mixture: In vitro diagnostic device

1.3. Name, Address, and Telephone of Manufacturer/Supplier

Kova International, Inc.

7272 Chapman Avenue, Suite B

Garden Grove, CA 92841

Tel: 1-714-902-1700

Toll free: 1-855-217-6399

Fax: 1-714-908-7945

Business hours: (8:00 a.m. - 5:00 p.m., PST, Monday - Friday)

1.4. Emergency Telephone Number

Emergency Number : Contact your local Poison center.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

This SDS is for the KOVA Slide 10 product only, this product is polymerized, formed to a specific design for end use, and is not considered hazardous. Materials/substances which are used with or stored in this product can pose separate hazards not covered in this SDS. In these cases the SDSs for any other hazardous materials should be referenced.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate	(CAS No) 9010-88-2	99.5 - 100	Comb. Dust
Methyl methacrylate	(CAS No) 80-62-6	< 0.5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 3, H402

Ethyl acrylate	(CAS No) 140-88-5	< 0.1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:vapor), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
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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). The need for first aid is not anticipated under normal conditions of use.

First-aid Measures After Inhalation: Not expected to be a primary route of exposure. When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Not expected to present a significant dermal hazard under anticipated conditions of normal use. If skin irritation occurs: Get medical advice/attention

First-aid Measures After Eye Contact: Not expected to be a primary route of exposure. If eye irritation persists: Get medical advice and attention

First-aid Measures After Ingestion: If swallowed, do not induce vomiting. Rinse mouth and obtain medical attention if necessary.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation: None expected under normal conditions of use.

Symptoms/Injuries After Skin Contact: None expected under normal conditions of use. May cause mechanical irritation.

Symptoms/Injuries After Eye Contact: None expected under normal conditions of use. May cause mechanical irritation.

Symptoms/Injuries After Ingestion: None expected under normal conditions of use. May cause irritation of the gastrointestinal tract.

Chronic Symptoms: None known.

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

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

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

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

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Use firefighting measures appropriate for the surrounding fire.

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

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Nitrogen oxides. Acrylates. May release flammable gases.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Accidental release of the product does not present a hazard under normal conditions of use.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use of personal protective equipment (PPE) is not generally required but should be evaluated based on the extent and severity of accidental release.

Emergency Procedures: Evacuate the area if accidental release presents a significant hazard.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection as conditions warrant.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. The product does not pose a significant hazard to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain the product and collect as any solid.

Methods for Cleaning Up: Clean up accidental release immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping as conditions permit. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Further processing of the product requires an evaluation of potential hazards based upon intended use. Risk of thermal burns on contact with molten product. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: There are no specific precautions necessary for safe handling of the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. No technical measures are necessary for storage of the product.

Storage Conditions: No specific conditions are required for storage of the product.

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

7.3. Specific End Use(s)

In vitro diagnostic device

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Methyl methacrylate (80-62-6)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA ACGIH	ACGIH STEL (ppm)	100 ppm
USA ACGIH	ACGIH chemical category	dermal sensitizer, Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	410 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA IDLH	US IDLH (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	410 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
Ethyl acrylate (140-88-5)		
USA ACGIH	ACGIH TWA (ppm)	5 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA IDLH	US IDLH (ppm)	300 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	100 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	25 ppm
USA OSHA	Limit value category (OSHA)	prevent or reduce skin absorption

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment

: Personal protective equipment is not generally required but should be evaluated based on conditions of use.

Materials for Protective Clothing	: Wear suitable protective clothing.
Hand Protection	: Wear protective gloves.
Eye Protection	: In laboratory, medical or industrial settings, or operations in which airborne particulates will be generated, safety glasses with side shields are recommended.
Skin and Body Protection	: In laboratory, medical or industrial settings, impervious disposable gloves and protective clothing are recommended if skin contact with hazardous product is possible.
Respiratory Protection	: In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Polymerized colorless solid
Odor	: Odorless
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
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	: No data available
Relative Density	: No data available
Specific Gravity	: 1.15 - 1.19
Solubility	: Insoluble in water
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information: No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products will not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Methyl methacrylate (80-62-6)	
LD50 Oral Rat	8420 - 10000 mg/kg
LD50 Dermal Rabbit	5000 - 7500 mg/kg
LC50 Inhalation Rat	29 mg/l/4h
LC50 Inhalation Rat	7093 ppm/4h
Ethyl acrylate (140-88-5)	
LD50 Oral Rat	550 mg/kg
LD50 Dermal Rabbit	1790 mg/kg
LC50 Inhalation Rat	5.78 mg/l/4h
LC50 Inhalation Rat	1410 ppm/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Methyl methacrylate (80-62-6)	
IARC group	3
Ethyl acrylate (140-88-5)	
IARC group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity, Substances delisted from report on Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: None expected under normal conditions of use.

Symptoms/Injuries After Skin Contact: None expected under normal conditions of use.

Symptoms/Injuries After Eye Contact: None expected under normal conditions of use.

Symptoms/Injuries After Ingestion: None expected under normal conditions of use. May cause irritation of the gastrointestinal tract.

Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

Methyl methacrylate (80-62-6)	
LC50 Fish 1	243 - 275 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	69 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	125.5 - 190.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Ethyl acrylate (140-88-5)	
LC50 Fish 1	4.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	7.9 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	2.31 - 2.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and Degradability

KOVA Slide 10	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

KOVA Slide 10	
Bioaccumulative Potential	Not established.
Methyl methacrylate (80-62-6)	
Log Pow	0.7
Ethyl acrylate (140-88-5)	
Log Pow	1.18 (at 25 °C)

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 in a safe manner in accordance with local, regional, national, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

- 14.1. In Accordance with DOT Not regulated for transport
- 14.2. 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

2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate (9010-88-2)

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

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
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Methyl methacrylate (80-62-6)

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

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	1000 lb
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SARA Section 313 - Emission Reporting	1.0 %
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Ethyl acrylate (140-88-5)

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

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	1000 lb
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SARA Section 313 - Emission Reporting	0.1 %
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15.2. US State Regulations

Ethyl acrylate (140-88-5)

U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
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Methyl methacrylate (80-62-6)

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List

Ethyl acrylate (140-88-5)

- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
- U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Other Information : 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 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
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 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1

STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)