SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name : Monopoly syrup, methyl methacrylate monomer

Product Code : J-305

Intended Use(s) : Painting medium for artificial eyes

CONTACT INFORMATION FOR SUPPLIER OF SAFETY DATA SHEET

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Middle East / Africa	:	(+) 1 928 537 8387
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SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification
Hazard class : Flammable liquids, Category 2
Hazard Pictogram(s) :

Signal word : Danger
Hazard statement(s) : H225 Highly flammable liquid and vapor
H240 Heating may cause an explosion
H317 May cause and allergic skin irritation
H319 Causes serious eye irritation

Precautionary statement(s) : **Prevention**

P210 Keep away from heat/sparks/open flame/hot surfaces, no smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/lighting equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P261 Avoid breathing mist or vapors
P271 Use only outdoors or in a well-ventilated area
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/ face protection

Response

P302 + P352 +P314 + P362 IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. Seek medical attention if irritation persists.
P304 + P340 + P314 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if you feel unwell.
P305 + P351 + P338 + P314 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if you feel unwell.
P301 + P311 +P322 IF SWALLOWED: Give one to two glasses of water if victim is alert. Call a POISON CENTER or doctor/physician.

Storage

P401 + P404 + P235 + P410 + P412 Store in a cool, dry place away from heat, sparks, flame and direct sunlight. Do not expose to temperatures exceeding 70°F (21°C).

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Other hazard(s) : Static-accumulating flammable liquid.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%)
Particulates NOC	NE	< 1
Residual monomers	80-62-6	< 99

The specific chemical identities have been withheld as a trade secret.

SECTION 4: FIRST-AID MEASURES

In the case of accident or if you feel unwell, see medical attention immediately. When symptoms persist, or in all cases of doubt, seek medical attention.

First-aid instructions by relevant routes of exposure include:

Inhalation : Remove victim to fresh air. Give oxygen or artificial respiration if not breathing. Seek medical attention if symptoms persist.

Skin contact : Immediately wash thoroughly with soap and water while removing contaminated clothing and shoes. Seek medical attention. Wash clothing and thoroughly clean shoes before reuse.

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, including under eyelids. If worn and easy to do, remove contact lenses. Seek medical attention.

Ingestion : DO NOT induce vomiting. Give two glasses of water to drink. Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed : Causes serious eye irritation. May cause mild skin irritation.

First aid responders : First aid responders should pay attention to self-protection and use the recommended personal protective equipment when the potential for exposure exists.

Note to physician : Treat symptomatically and supportively.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media : Alcohol foam, carbon dioxide and dry chemical

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Heat can cause polymerization with rapid release of energy which may rupture container explosively. Exposure to combustion products may be a hazard to health. Prevent buildup of vapors or gases to explosive concentrations.

Hazardous combustion products	:	Oxides of carbon
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Evacuate area and eliminate sources of ignition. Use water spray to cool unopened containers. Remove undamaged containers from fire area if safe to do so.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Firefighting equipment should be thoroughly decontaminated after use.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures	:	Remove all sources of ignition, ventilate the area and keep upwind. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area by containment or oil barriers. Retain and dispose of contaminated wash water. Spills on porous surfaces can contaminate groundwater. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleanup procedures	:	Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mist with a water spray jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. See Sections 13 and 15 of this SDS for information regarding certain local or national requirements.

SECTION 7: HANDLING AND STORAGE

Technical measures	:	Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical

properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it is necessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity.

Local/total ventilation : Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.

Precautions for safe handling : Do not get on skin or clothing. Do not breathe vapors or spray mist. Do not swallow. Do not get in eyes. Handle in accordance with good industrial hygiene and safety practice. Non-sparking tools should be used. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed and in a cool, well-ventilated place away from heat, sparks, flame and direct sunlight. Store in accordance with the particular national regulations.

Materials to avoid : Oxidizing agents, reducing agents, peroxides, acids, alkalis, amines and UV light.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Component Name, CAS Number		ppm	mg/m^3	ppm	mg/m^3
Particulates NOC, NE	TWA	15		NE	
	STEL				
Residual Monomers, 80-62-6	TWA	100		NE	
	STEL				

Engineering Controls : Processing may form hazardous compounds (see Section 10). Minimize workplace exposure concentrations. Use only in an area equipped with explosion proof exhaust ventilation. Use with local exhaust ventilation.

Personal Protective Equipment Pictograms :

Respiratory : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Eye/Face : Use safety goggles as a minimum when working with chemicals.

Hands : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, clarify the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands thoroughly before breaks and at the end of workday.

Skin/Body : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Wear the following personal protective equipment: flame retardant antistatic protective clothing. Avoid skin contact by using protective clothing (gloves, aprons, boots, etc.).

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Clear liquid
Upper/lower flammability or explosive limits	:	12.5 / 2.12
Odor	:	Acrid
Vapor pressure	:	28 mm Hg @ 68°F

Odor	:	Acrid Odor
Vapor density	:	3.5 @ 60°F
pH	:	No data available
Relative density	:	No data available
Melting point/freezing point	:	No data available
Solubility(ies)	:	Moderate
Initial boiling point and boiling range	:	214°F (101°C)
Flash point	:	52.7°F (11.5°C)
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	:	Reactive
Chemical stability	:	Unstable; may polymerize at elevated temperatures.
Hazardous reactions	:	Highly flammable liquid and vapor. Temperatures above 70°F (21°C) can produce vapors that can mix with air and burn or be explosive. May form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures. Hazardous polymerization may occur.
Conditions to avoid	:	Heat above 70°F, flames and sparks; aging and contamination.
Incompatibilities	:	Oxidizing agents, reducing agents, peroxides, acids, alkalis, amines and UV light. Material has strong solvent properties and can soften paint and rubber.
Hazardous thermal decomposition products	:	Oxides of carbon

SECTION 11: TOXICOLOGICAL INFORMATION

Mixture Toxicity
Inhalation Toxicity: 4,876mg/L

Component Toxicity

Routes of Exposure
No data available

Target Organs
Eyes Skin Respiratory System

Effects of Overexposure

Product Components Listed as Carcinogenic

SECTION 12: ECOLOGICAL INFORMATION

Methacrylate monomer
Toxicity to fish
LC50 : Pimephales promelas (fathead minnow) 410 mg/l
Exposure time : 96 h

Toxicity to aquatic invertebrates – No data available

Toxicity to aquatic plants – No data available

PERSISTENCE AND DEGRADABILITY – No data available

BIOACCUMULATIVE POTENTIAL – No data available

MOBILITY IN SOIL - No data available

OTHER ADVERSE EFFECTS – The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Product	:	This product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.
Resource Conservation And Recovery Act (RCRA)	:	When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste.
Waste Code	:	D001 Ignitability
Waste from residues	:	Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product. Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: TRANSPORT INFORMATION

US DOT

Proper shipping name : Methyl methacrylate monomer, stabilized
UN number : UN1247
Hazard class(es) : 3
Packing group : II
Labels : Flammable liquids
ERG Code : 129P
Marine pollutant : No

IATA and ICAO

Proper shipping name : Methyl methacrylate monomer, stabilized
UN number : UN1247
Hazard class(es) : 3
Packing group : II
Labels : Flammable liquids
Packing instructions : Passenger/Cargo aircraft – 353

SECTION 15: REGULATORY INFORMATION

EPCRA - EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW

CERCLA Reportable Quantity

Ingredients	CAS Number	Component RQ (lbs)
Methyl methacrylate monomer	80-62-6	1,000

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS Number	Component RQ (lbs)
Methyl methacrylate monomer	80-62-6	1,000

SARA 311/312 Hazards : Fire hazard
Acute health hazard
Reactive hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Methyl methacrylate monomer	80-62-6	99%

US STATE REGULATIONS

California Prop 65 This product contains no chemical(s) known in the State of California to cause birth defects or other reproductive harm.

Massachusetts Right To Know

Methyl methacrylate monomer	80-62-6	99%

New Jersy Right To Know

Methyl methacrylate monomer	80-62-6	99%

Pennsylvania Right To Know

Methyl methacrylate monomer	80-62-6	99%

Rhode Island Right To Know

Methyl methacrylate monomer	80-62-6	99%

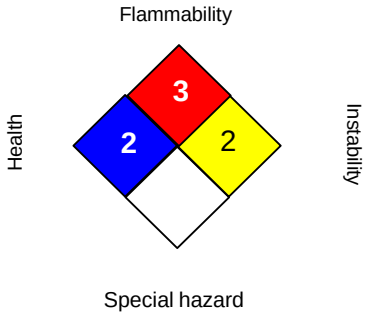
The ingredients of this product are reported in the following inventories:

NZIoC	All ingredients listed or exempt
REACH	All ingredients (pre-) registered or exempt
TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances
AICS	All ingredients listed or exempt
IECSC	All ingredients listed or exempt
ENCS/ISHL	All components are listed on ENCS/ISHL or exempted from inventory listing
KECI	All ingredients listed, exempt or notified
PICCS	All ingredients listed or exempt
DSL	All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL)

Inventories: AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16: OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight, 2 = Moderate,
3 = High 4 = Extreme, * = Chronic

DISCLAIMER / STATEMENT OF LIABILITY:

Factor II, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology and/or fire prevention as necessary or appropriate to the use and understanding of the data contained in this SDS.

To promote safe handling each customer or recipient should 1) notify and furnish its employees, agents, contractors, customers and/or others whom it knows or believes will use this material of the information regarding hazards or safety, and 2) request its customers to notify their employees, customers and other users of the product of this information.