

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Trade name : UTR & UTF Fina-Met Mounting Powder
 Synonyms : Phenolic Molding Compound

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

1.3. Details of the supplier of the safety data sheet

Mark V Laboratory
 18 Kripes Rd
 East Granby, CT USA
 860-653-7201_
www.markvlab.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Carc. 2 H351

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H351 - Suspected of causing cancer
 H232 - May form combustible dust concentrations in air

Precautionary statements (GHS-US) : P202 - Do not handle until all safety precautions have been read and understood
 P264 - Wash hands, forearms and face thoroughly after handling
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P501 - Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

2.3. Other hazards

Other hazards not contributing to the classification : Phenol, formaldehyde, and ammonia vapors may be released during molding processes. Overexposure to these vapors may cause irritation to eyes, nose, throat, and skin. Sensitized individuals may experience allergic skin reactions. Exposure to dust from machining operations may cause nose and throat irritation. High concentration of airborne dust may form an explosive mixture with air. Ensure that good housekeeping practices are followed, as well as applicable guidelines such as National Fire Protection Association (NFPA) 654, "Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids."

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
hexamethylenetetramine	(CAS No) 100-97-0	5 - 10	Flam. Sol. 2, H228 Skin Sens. 1, H317 Aquatic Acute 3, H402
titanium(IV) oxide	(CAS No) 13463-67-7	0.1 - 1	Carc. 2, H351

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). Suspected of causing cancer.
First-aid measures after inhalation	: Call a POISON CENTER or doctor/physician if you feel unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Obtain emergency medical attention.

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

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: high concentration of airborne dust may form an explosive mixture with air.
Reactivity	: Thermal decomposition generates : Corrosive vapors.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
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	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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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. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid breathing fumes from molding or other processes involving heat. Avoid breathing dusts from cutting, machining or deflashing operations. Guard against dust accumulation of this material. High concentrations of airborne dust may form explosive mixture with air. As with all chemicals, good industrial hygiene practices should be followed when handling this material.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.
- Storage conditions : Keep only in the original container. Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from :
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Storage temperature : $\leq 25^{\circ}\text{C}$
- Storage area : Store in cool, dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

FM 4005 GREEN		
ACGIH	Not applicable	
OSHA	Not applicable	
hexamethylenetetramine (100-97-0)		
ACGIH	Not applicable	
OSHA	Not applicable	
titanium(IV) oxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
ACGIH	Remark (ACGIH)	LRT irr; A3
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear respiratory protection. Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Green colored granules.
- Color : Green
- Odor : Characteristic odour Mild odour
- Odor threshold : No data available
- pH : No data available

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: Mixtures of fine dust and air can create an explosion hazard.
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: 1.7 - 1.9
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.7 - 1.9g/cm ³
Solubility	: Negligible in water. Water: Solubility in water of component(s) of the mixture: • : > 80 g/100ml • : • : 0.01 g/100ml • : 0.0040 g/100ml • : 0.15 g/100ml • : < 0.01 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

Minimum ignition energy : Typically >500 degrees celsius by Pensky-Martens method

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Not established.

10.3. Possibility of hazardous reactions

Not established.

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.

10.6. Hazardous decomposition products

Hazardous decomposition products may include: phenol, formaldehyde, ammonia, carbon monoxide, carbon dioxide, hydrogen cyanide, particulate matter and other organic compounds. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

hexamethylenetetramine (100-97-0)	
LD50 oral rat	> 5000 mg/kg (Rat)
titanium(IV) oxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg (> 5000 mg/kg bodyweight; Rat; Rat; Experimental value; Experimental value,> 5000 mg/kg bodyweight; Rat; Rat; Experimental value; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value,Rat; Experimental value)

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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

titanium(IV) oxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

hexamethylenetetramine (100-97-0)	
LC50 fish 1	49800 mg/l (96 h; Pimephales promelas; Measured concentration)
EC50 Daphnia 1	36000 mg/l (48 h; Daphnia magna)
EC50 other aquatic organisms 1	3 g/l (336 h; Selenastrum capricornutum; Growth rate)
LC50 fish 2	49000 mg/l (96 h; Cyprinodon variegatus; Nominal concentration)
EC50 Daphnia 2	92.500 mg/l (96 h; Crustacea)
Threshold limit algae 1	1500 mg/l (336 h; Selenastrum capricornutum)
titanium(IV) oxide (13463-67-7)	
LC50 fish 1	> 1000 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	< 1000 mg/l (432 h; Daphnia magna; Static system)
LC50 fish 2	> 1 g/l (96 h; Leuciscus idus)
EC50 Daphnia 2	< 500 mg/l (720 h; Daphnia magna; Static system)
Threshold limit algae 1	61 mg/l (72 h; Pseudokirchneriella subcapitata)

12.2. Persistence and degradability

FM 4005 GREEN	
Persistence and degradability	Not established.
hexamethylenetetramine (100-97-0)	
Persistence and degradability	Hydrolysis in water.
Biochemical oxygen demand (BOD)	0.026 g O ₂ /g substance
ThOD	1.37 g O ₂ /g substance (NH ₃)
BOD (% of ThOD)	0.01897 % ThOD
titanium(IV) oxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

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hexamethylenetetramine (100-97-0)	
Log Pow	-4.15 - -2.13
Bioaccumulative potential	Bioaccumulation: not applicable.
titanium(IV) oxide (13463-67-7)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

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/national regulations. Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

hexamethylenetetramine (100-97-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
titanium(IV) oxide (13463-67-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

titanium(IV) oxide (13463-67-7)	
Listed on IARC (International Agency for Research on Cancer)	

15.3. US State regulations

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SECTION 16: Other information

Indication of changes : Revision - See : *

Other information : None.

Full text of H-phrases:

Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Flam. Sol. 2	Flammable solids Category 2
Skin Sens. 1	Skin sensitization Category 1
H228	Flammable solid
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H402	Harmful to aquatic life

SDS US (GHS HazCom 2012) SBNA

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