

SAFETY DATA SHEET

SDS# 1007

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: USP® #640 Plastic Roof Cement
CAS #: Mixture
Generic Name: Roof Mastic
Chemical Name: Asphalt Mixture (Article)
Chemical Family: N/A

Recommended Use: Used to install, repair or rebuild roof flashings at parapet walls, gravel stops, stacks, vents, monitors and similar applications. Can be used with fiberglass, polyester fabrics or roll roofing for permanent repairs

Recommended Restrictions: For exterior use only. Do not use indoors.

Supplier Information:

U.S. PLY, INC.
 P.O. Box 163980
 Fort Worth, TX 76161
 (817) 413-0103
 Internet Website: www.usply.com
 Email: technical@usply.com

Toll Manufacturer Location:

RM Lucas Company
 3211 South Wood Street
 Chicago, Illinois 60608
 (773) 523-4300
 www.rmlucas.com

Emergency Telephone Number

Company Phone: (817) 413-0103
 Call Chemtrec Day or Night: 1-800-424-9300

Trade Name: USP® #640 Plastic Roof Cement, aka (Lucas 744)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Emergency Overview

Danger

Hazard Statements

May Cause genetic defects.
 May cause cancer.
 Causes damage to organs through prolonged or repeated exposure.
 May be fatal if swallowed and enters airways.
 Flammable liquid and vapor



Appearance Thick mastic **Physical State** Liquid **Odor** Solvent (Mineral Spirits)

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- Keep container tightly closed when product is not in use. Ground/bond container and receiving equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Use explosion-proof electrical/ventilating/lighting/equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up.

Store in well ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

See section 13 of this SDS for disposal instructions.

Hazards not otherwise classified (HNOC)

None known

Supplemental Information

- May be harmful if swallowed
- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects

Unknown Acute Toxicity: 99.3586% of mixture consist of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS**Substance Mixture**

This product is a mixture.

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Common Name	Flashing Cement
Synonyms	None
Chemical Nature	Organic Solvents and additives

Chemical Name	CAS #	Weight - %	Trade Secret
Asphalt (at Ambient Temperature)	8052-42-4	50 – 60%	*
Mineral Spirits (with < 0.1% Benzene)	8052-41-3	20 - 30%	*
Hydrated Aluminum-Magnesium Silicate (attapulgit)	12174-11-7	10 - 20%	*
Cellulose Fiber	9004-34-6	0 - 10%	*
Aromatic Naptha	64742-95-6	0 - 10%	*
Kaolin	1332-58-7	0- 10%	*
Alkyl Amine Acetate	28701-67-9	0 - 10%	*
Nonane	111-84-2	0 - 10%	*
Styrene/Butadiene Copolymer	9003-55-8	0 - 10%	*
Quartz	14808-60-7	0 - 10%	*

4. FIRST AID MEASURES**Description of first aid measures**

General Advice	Contains petroleum distillate. Harmful or fatal if swallowed. Vapor harmful. May affect the brain or central nervous system causing dizziness, headache, or nausea. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get medical attention immediately
Ingestion	Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical attention immediately. Most important symptoms /effects, acute and delayed indication of immediate medical and special treatment needed.
Self-protection of the first aider	First aider: Pay attention to self-protection!

Most important symptoms and effects, both acute and delayed

Symptoms May cause skin irritation. May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to Physicians Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbondioxide (CO2). Sand. Use foam or water FOG as a last resort.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Sealed container may rupture/burst when heated or exposed to excessive heat.

Hazardous combustion products Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Explosion data

Sensitivity to Mechanical Impact Not sensitive.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions No action should be taken involving any personal risk or without suitable training. Use personal protective equipment as required.

Other Information Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous earth, vermiculite.

Methods for cleaning up Pick up the absorbed material (described just above) and transfer to properly labeled containers for disposal according to local / national regulations (see Section 13).

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Remove all sources of ignition. Use only outdoors.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, dry, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition.

Incompatible materials Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines

No ACGIH or OSHA PEL is assigned to this mixture. Exposure limits for the component materials are shown below. This product, as supplied, is not believed to contain any hazardous material that exceeds exposure limits established by OSHA.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Asphalt (at ambient temperature) (CAS 8052-42-4)	TWA: 0.5 mg/m ³ benzene-soluble aerosol fume, inhalable particulate matter	-	Ceiling: 5 mg/m ³ fume 15 min
Mineral Spirits (with < 0.1% Benzene) (CAS 8052-41-3)	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³
Hydrated Aluminum-Magnesium Silicate (Attapulgit) 12174-11-7	TWA: 1 mg/m ³ respirable particulate matter	-	-
Cellulose Fiber 9004-34-6	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ (vacated) STEL: 10 mg/m ³	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust TWA: 1 mg/m ³
Kaolin 1332-58-7	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Nonane 111-84-2	TWA: 200 ppm	(vacated) TWA: 200 ppm (vacated) TWA: 1050 mg/m ³	TWA: 200 ppm TWA: 1050 mg/m ³
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction: (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

Appropriate engineering controls

Engineering Controls

Use natural cross ventilation, local (mechanical) pick-up, and/or general area mechanical cross ventilation. Ventilation pattern should be designed to prevent accumulation of vapors. Ventilation must be sufficient to maintain vapor concentrations below the TWA limits outlined above.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear protective gloves and protective clothing that is resistant to chemical penetration.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations

Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Solvent (Mineral Spirits)
Appearance	Thick Mastic	Odor threshold	1-30 PPM. Odor thresholds vary greatly. Do not rely on odor threshold alone to determine potentially hazardous substances.
Color	Black		
Property	Values	Remarks + Methods	
pH	Not Applicable		
Melting point/freezing point	None / -70 °C None / -94 °F		Melting Point is not applicable. Freezing points are shown.
Boiling point / boiling range	> 154 °C / 310 °F		
Flash point	> 40.5 °C / 105 °F		Setaflash
Evaporation rate	0.1		Butly acetate = 1
Flammability (solid, gas)	No information available		
Flammability Limit in Air			Flammable above 105 °F and 40.5 °C

Upper flammability limit:	7.0	
Lower flammability limit:	1.6	
Vapor pressure	0.3 (kPa)	@ 20 °C
Vapor density	5.3	Where: Air = 1 at 68 °F (20 °C)
Specific Gravity	1.09	Water = 1 g/ml
Solubility in other solvents	Insoluble	
Partition coefficient	No information available	No data available
Autoignition temperature	330 °C / 626 °F	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	Vapor accumulation could flash or explode if ignited.	
Oxidizing properties	None	

Other Information

Softening point	Not applicable
Molecular weight	No information available
VOC Content (%)	Less than 270 g/l
Density	9.2 to 9.5 lb/gal
Bulk density	Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical Stability

Stable

Possible hazardous reactions

None under normal use

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Avoid static discharge. Avoid heat, open flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately. However, ingestion is not likely to be a primary route of exposure.

Inhalation Avoid breathing vapors or mists.

Skin contact May cause irritation.

Eye contact Avoid contact with eyes. Contact with eyes may cause irritation.

Component Information * The IARC Monograph (Vol. 103, 2013, Bitumen and Bitumen Emissions) defines Asphalt as 'Group 2B, Possible Carcinogen to Humans'. This definition is based on studies of exposure to Asphalt fumes at elevated temperatures. The Monograph states that temperature plays an important role in determining the degree of exposure and also the carcinogenic potential of bitumen emissions. This same Monograph states that Asphalt is nonvolatile at ambient temperature. There is no data presented in the Monograph to demonstrate that Asphalt at ambient temperature is considered a carcinogen. Since the normal use of this product is at ambient temperature, the Asphalt used in this product is not listed as a carcinogen. No other national or international agency has defined Asphalt as a carcinogen.

* No significant exposure to Crystalline Silica (Quartz) is thought to occur during the use of products in which Crystalline Silica (Quartz) is bound to other materials, such as in paints and coatings. As one reference, see California Office of Health Hazard Assessment at: http://www.oehha.org/prop65/CRNR_notices/safe_use/sylicasud2.html

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt (at Ambient Temperature) – 8052-42-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 94.4 mg/m ³ (Rat) 4.5 h
Cellulose Fiber – 9004-34-6	> 5 g/kg (Rat)	> 2 g/kg (Rabbit) > 2000 mg/kg (Rabbit)	> 5800 mg/m ³ (Rat) 4 h

Aromatic Naptha – 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Kaolin – 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Alkyl Amine Acetate – 28701-67-9	= 1216 mg/kg (Rat)	-	-
Nonane – 111-84-2	-	-	=3200 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Can cause skin irritation.
Serious eye damage/eye irritation Irritating to eyes.
Irritation Irritating to eyes, respiratory system and skin.
Corrosivity Not classified
Sensitization May cause sensitization of susceptible persons.
Germ cell mutagenicity Contains a known or suspected mutagen.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrated Aluminum-Magnesium Silicate (Attapulgite) – 12174-11-7	-	Group 2B	-	X
Cellulose Fiber – 9004-34-6	-	-	Known	-
Styrene/Butadiene Copolymer – 9003-55-8	-	Group 3	-	-
Quartz	A2	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)		IARC (International Agency for Research on Cancer)	
A1	Known Human Carcinogen	Group 1	Carcinogenic to Humans
A2	Suspected Human Carcinogen	Group 2A	Probably Carcinogenic to Humans
A3	Animal Carcinogen	Group 2B	Possibly Carcinogenic to Humans
A4	Not Classified as a Human Carcinogen	Group 3	Not Classifiable as a Human Carcinogen

NTP (National Toxicology Program)		OSHA (Occupational Safety and Health Administration of the US Department of Labor)	
Known	Known Carcinogen	X	Present
Reasonably Anticipated	Reasonably Anticipated to be a Human Carcinogen		

Reproductive toxicity: None known for product as a whole.
 Developmental Toxicity None known for product as a whole.
 Teratogenicity None Known.
 STOT – Single exposure: No information available
 STOT – Repeated exposure: No information available
 Aspiration hazard: No information available

Numerical measures of toxicity - No information available

The following values are calculated based on chapter 3.1 of the GHS document. For exterior use only. Do not use indoors.

ATEmix (oral) 4,875.20
 ATEmix (dermal) 2,052.40
 ATEmix (inhalation-dust/mist) 6.35
 ATEmix (inhalation-vapor) 5,056.40

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.68796 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Species	Test Results
Aromatic Naptha – 64742-95-6	-	9.22: 96 h Oncorhynchus mykiss mg/L LC50	6.14: 48 h Daphnia magna mg/LEC50

Persistence and degradability

No information available.

Bioaccumulation potential

No information available.

Chemical Name	Partition coefficient
Asphalt (at Ambient Temperature) – 8052-42-4	> 6

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONSWater treatment methods

Disposal of waste	Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

14. TRANSPORTATION INFORMATION

DOT Regulated
 DOT Ground: Not regulated if shipped in containers < 119 gallons (450 liters).
 DOT Ground: Regulated if shipped in containers > 119 gallons (450 liters).

UN/ID no. 1993
Hazard Class 3
Packing Group III

TDG **Regulated**
UN/ID no. NA 1993
Proper shipping name Combustible liquid, n.o.s
Hazard Class 3
Packing Group III

MEX Regulated
UN/ID no. NA 1993
Proper shipping name Combustible liquid, n.o.s

ICAO (air) Regulated
UN/ID no. 1993

IATA Regulated
UN/ID no. 1993

IMDG Regulated
UN/ID no. 1993

RID Not applicable in the United States.

ADR Not applicable in the United States.

ADN Not applicable in the United States.

15. REGULATORY INFORMATIONInternational Inventories

TSCA All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt.
DSL/NDSL All of the components of this product are listed on the DSL.

Legend

TSCA United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS Japan Existing and New Chemical Substances
IECSC China Inventory of Existing Chemical Substances
KECL Korean Existing and Evaluated Chemical Substances
PICCS Philippines Inventory of Chemicals and Chemical Substances
AICS Australian Inventory of Chemical Substances

US Federal RegulationsSARA 313

Section 313 of Title III of the superfund Amendments and reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the code of Federal Regulations, Part 372.

SARA 311/312

Acute health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes

