

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

Distributed By: R.E. CARROLL INC. 1570 NORTH OLDEN AVE., TRENTON, N.J. 08638-3204

609-695-6211/800-257-9365

Read the entire SDS for a complete hazard assessment.

Section 1. Product and Company Identification

1.1 Product Identifiers

Product Name: Sun-Tack C9 Petroleum Resin

Composition: Petroleum Distillate

Synonyms: Petroleum Pitch, Asphaltene Pitch, Asphalt

Chemical Family: Petroleum Hydrocarbon Resin

Product Grades: U-90, U-101, U-120, UU-120P, U-140, GS-90, SK-120, YT-130, YT-140, GA-100R, GA-120

1.2 Recommended use: Adhesives, Paints, Coatings, Inks, Sealant, Rubber Compound

Restrictions on use: Commercial formulation use only.

1.3 Manufacturer and Supplier/Distributor:

Manufacturer

United Performance Materials Corporation

13F-5, NO. 206, SEC. 2, NANKING ERD.

TAIPEI, TAIWAN ROC

Phone: TAIPEI 886-2-2507-2387

Fax: 886-2-2507-2097

Person in Charge: Mr. F. H. Liao

Email: upmresin@fucc.com.tw

Distributor

R.E. Carroll, Inc.

1570 North Olden Avenue

Trenton, NJ 08638-3204 USA

609-695-6211

609-695-0102

QA / Compliance Manager John Boruta

Email: johnb@reccarroll.com

1.4 Emergency telephone number:

In Taipei 02-2507-2387 ext 139

In the US: For a transport accident or leak, fire or major spill, call CHEMTREC, (800) 424-9300.

For International CHEMTREC assistance, call 1-703-527-3887 (collect calls accepted).

Section 2. Hazards Identification

2.1 Globally Harmonized System (GHS) Hazard Classification:

This SDS meets the requirements of GHS Revision 3, HCS 2012 (29 CFR 1910.1200).

GHS Classification: Not classified as hazardous under GHS.

Health Hazards: None

Physical Hazards: None

Environmental Hazards: None

OSHA Classification in accordance with 29 CFR 1910 (OSHA HCS): Combustible Dust: hazardous.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

2.2 Label Elements including Precautionary Statements:

Hazard Pictogram: None

Signal Word: Warning!

Hazard Statement: May form combustible dust concentrations in air.

Exposure to fumes, vapors, or smoke of over-heated product can result in irritation of eyes.

Direct contact of molten material will cause injury and burns.

Prevention: Wear protective gloves/protective clothing/eye protection/face protection.

Keep away from all ignition sources. No smoking. Prevent dust accumulations to minimize explosion hazard. Use explosion-proof (electrical/ventilation/lighting) equipment. Use non-sparking tools.

Take action to prevent static discharge.

Response: If exposed or concerned: Get medical advice/attention.

If on skin Wash with plenty of soap and water. If irritation or rash occurs: Get medical advice/attention.

If Inhaled: Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.

Storage: Store in accordance with local regional national international regulations. Ground/bond container and receiving equipment.

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

2.3 Hazard(s) Not Otherwise Classified (HNOC): Fumes from heated product may cause respiratory irritation. Heated product will cause thermal burns.

2.4 OTHER: HMIS Rating USA: Health: 1 Flammability: 1 Reactivity: 0 PPE: See SDS Sec. 8.3.

Section 3. Composition/Information on Ingredients

Chemical Name	CAS No.	Weight %	Trade Secret
C9 Petroleum Resin	64742-51-4	100	No

Section 4. First-Aid Measures

General Information:

If you feel unwell, seek medical advice (show label where possible). Show this safety data sheet to the doctor in attendance.

4.1 Ingestion

No specific first aid measures noted. Not acutely toxic by ingestion.

If material is ingested, DO NOT induce vomiting.

WHEN MOLTEN ONLY: Molten product can cause thermal burns. Obtain medical attention immediately.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

4.2 Inhalation

If fumes from heated product are inhaled, move to fresh air.

Call a POISON CENTER or doctor/physician if you feel unwell.

WHEN MOLTEN ONLY: Molten product can cause thermal burns. Obtain medical attention immediately.

Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

4.3 Skin contact

Solid: No specific first aid measures noted.

WHEN MOLTEN ONLY: Molten product can cause thermal burns. Cool molten material adhering to skin as soon as possible. In serious cases, use emergency shower immediately. Immediately flush skin thoroughly with cold water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention to remove material adhering to skin and treatment of burns.

4.4 Eye contact

Solid: No specific first aid measures noted.

Exposure to fumes, vapors, or smoke of over-heated product can result in irritation of eyes.

WHEN MOLTEN ONLY: Molten product can cause thermal burns. Immediately flush eyes with water and continue washing for at least 15 minutes. If contact lenses are present, DO NOT delay irrigation or attempt to remove the lens. Obtain medical attention.

When handling molten product, eye shield must be worn at all times.

4.5 Acute and delayed symptoms/effects

Eye Contact: This product is not an eye irritant. Mechanical irritation may occur if powder comes in contact with eyes, scratched cornea may result. Fumes may irritate eyes.

Skin Contact: This product is not a skin irritant and is not absorbed thru the skin in harmful amounts. May cause mild irritation. Reddening, scaling, and itching are characteristics of skin inflammation. Prolonged contact may cause skin irritation.

If direct contact is made with melted material, thermal burns will occur

Inhalation: This product is not an inhalation irritant. If the product is heated, vapors may develop and cause irritation. Excessive exposure may cause irritation to eyes, nose, throat, lungs, and respiratory tract.

4.6 Indication of immediate medical attention and notes for physicians:

Treat contact with molten material as thermal burns.

Section 5. Fire-Fighting Measures

5.1 Flammable Properties:

Flash Point: >230 °C (446 °F) DIN ISO 2592

Thermal decomposition: See Section 10

Fire and Explosion Hazard: Dust can form an explosive mixture with air.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

5.2 Extinguishing media

Suitable: dry chemical, carbon dioxide (in case of small fires), water fog, foam.

Unsuitable: Do not use a solid water stream as it may scatter and spread fire. Do not use straight streams.

5.3 Special hazards arising from the chemical:

Unusual fire and explosion hazards: Dust can form an explosive mixture with air. Pouring or conveying the dry material or allowing it to free fall may generate electrostatic sparks, potentially causing ignition. Check that all equipment is properly grounded and bonded to prevent sparks.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating.

5.4 Special protective equipment and precautions for firefighters:

Special fire-fighting procedures:

Do not direct a solid stream of water or foam into burning material; this may cause spattering and spread the fire. Cool containers exposed to heat with water spray and remove container, if no risk is involved. If a rail or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters: No special protective equipment required. Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves) to protect against other burning material. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Keep unnecessary personnel away. Wear suitable protective equipment. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation

6.2 Environmental precautions

Avoid runoff to sewers or waterways. Dike area of spill to prevent spreading, and pump liquid to salvage tank. Waste: avoid washing into water courses. Use methods consistent with local regulations or incinerate.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

Notification: Any spill or release to navigable water must be reported immediately to the National Response Center (800/424-8802), as required by U.S. federal law.

6.3 Methods and material for containment and cleaning up

Sweep up using non-sparking equipment. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Allow material to solidify, and scrape up. Following product recovery, flush area with water.

Small Spills: Where possible allow molten material to solidify naturally. Never return spills to original containers for re-use.

Floor may be slippery; use care to avoid falling.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7. Handling and Storage

7.1 Precautions for safe handling:

Do not handle at temperatures $>+40^{\circ}\text{C}$, unless wearing appropriate protective equipment. When kept in molten state, inert gas blanketing may be used to avoid material degradation. The material is a solid at room temperature exhibiting elevated temperature softening characteristics. Above its softening point, the material liquefies and flows more readily as the temperature increases. The material may be used as a hot liquid for application purposes and requires caution in handling. As a solid, avoid contamination by keeping in closed containers.

Do not handle until all safety precautions have been read and understood. Heat only in areas with appropriate exhaust ventilation. Do not breathe fume/mist/vapors. Avoid contact with molten material.

Follow procedures specified in the National Fire Protection Association Codes and Standards for handling combustible dusts. Maintain good housekeeping to minimize dust generation and accumulation. To reduce the potential for dust explosions, electrically bond and ground equipment. No smoking, open flames or sources of ignition in handling and storage area.

When using, do not eat, drink, or smoke. Observe good industrial hygiene practices.

Do not empty into drains. Avoid release to the environment.

Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including all incompatibilities

VENTILATION

General (mechanical) room ventilation is expected to be satisfactory for use at room temperature

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

STORAGE

Keep away from heat, sparks, and flame. Do not store at temperatures $>+30^{\circ}\text{C}$. Store protected from sunlight. Keep in an area equipped with sprinklers. Store away from incompatible materials.

Section 8. Exposure Controls and Personal Protection

Consult with a Health and Safety Professional for specific selections.

8.1 Control parameter: Occupational exposure limits

EXPOSURE LIMIT VALUES: No exposure limits or Biological limit values have been established for product.

Exposure limits (fumes): ACGIH (United States, 2002) TWA: 2mg/m³

NIOSH (United States, 2002) TWA: 2mg/m³

(Dust): ACGIH TLV 10mg/m³ (inhal) TWA OSHA PEL 5mg/m³ (Resp)

(Dust): ACGIH TLV 3mg/m³ (Resp) TWA OSHA PEL 15mg/m³ (Total)

8.2 Appropriate engineering controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use proper bonding and grounding of all equipment.

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks: Refer to NFPA 654, *Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids*, for safe handling.

8.3 Personal protective equipment:

Respiratory protection: None expected to be needed for solid product.

Hand protection/protective gloves: Wear oil resistant gloves.

Environmental Exposure Controls: None expected to be needed.

WHEN MOLTEN ONLY:

Hand protection: Wear gloves impervious to this material and able to resist and protect employees from the elevated temperature.

Eye protection: Face shield or chemical splash goggles in case of splashing.

Skin protection: Wear protective clothing, such as long sleeves to minimize skin contact. Proper protective splash resistant clothing, thermal gloves, splash resistant shoes, must be worn to prevent injury.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection.

Section 9. Physical and Chemical Properties

Physical State: Solid
Color: Yellow-brown
Odor: Mild Petroleum
Odor Threshold: N/A
Flash Point: > 230 °C (> 445 °F) DIN ISO 2592
Flammability (solid, gaseous): Will support a flame above flashpoint.
Danger of explosion: Product may form explosive dusts clouds in air
Self igniting: Product will not self ignite
Upper explosion limits: >450 °C DIN 51 794
Lower explosion limits: No data
Vapor Pressure: at 25 °C < 0.2 mbar DIN 51 754
Evaporation rate (Butyl acetate < 1) No data
Vapor Density (air=1): No data
Relative Density at 25 °C: at 25 °C 0.97-1.04 g/cm³ DIN 52 004
Bulk Density: Not available
Solubility in Water: Insoluble
Solubility in organic solvents: Soluble
Viscosity: No data
Boiling Point: No Data
pH: N/A
Specific gravity (H₂O=1): No data
Partitioning coefficient log POW: No data
VOC ~0%
Autoignition Temperature: No Data
Melting Point: 90-140 °C ASTM E28
Molecular weight 1000-1400

Section 10. Stability and Reactivity

10.1 Chemical stability: Stable under normal temperature conditions and recommended use.

10.2 Possibility of hazardous reactions: No hazardous reactions if stored and handled as prescribed.

10.3 Conditions to avoid: Normal handling Keep out of direct sunlight.

10.4 Incompatible materials: Strong oxidizing agents.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

10.5 Hazardous decomposition products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. Fumes can be irritating.

10.6 Hazardous Polymerization: Will not polymerize.

Section 11. Toxicological Information

11.1 Information on the likely routes of exposure: Inhalation, ingestion, skin and eye contact.

11.2 Information on toxicological effects:

Acute toxicity: 7g/kg ORAL-MAMMAL

Dermal LD 50 > 2000mg/Kg (rabbit)

Inhalation LC50 > 5.28 mg/l (rat)

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system. Vapors may be irritating to eyes, nose, throat, and lungs.

Eye contact Dust contact with the eyes can lead to mechanical irritation.
Molten product can cause thermal burns.

Skin Contact Dust contact with the skin can lead to mechanical irritation.
Molten product can cause thermal burns.

Ingestion Product is non-toxic by ingestion.

GHS Classification:

Skin corrosion/irritation: Classification: Not classified as irritant

Serious eye damage/irritation: Classification: Not classified as irritant

Inhalation: Classification: Not classified as irritant

When heated, irritating vapors may be formed.

Respiratory sensitization: None known.

Classification: Does not cause respiratory sensitization

Skin sensitization: None known.

Classification: Not classified

Repeated dose toxicity None known.

11.3 Carcinogenicity, Mutagenicity, Reproductive Toxicity, and Teratogenicity:

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

Not classified as a human carcinogen by ACGIH, NTP, or OSHA.

Not known to be a mutagen, teratogen, or reproductive hazard.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard Solid product: Not likely, due to the form of the product.

Chronic effects

Not expected to be hazardous by OSHA criteria.

Exposure to dusts or vapors, fumes, or smoke from molten material can produce irritation of respiratory tracts and possible physical discomfort to sensitive individuals.

Further information: None.

Section 12. Ecological Information

This product is stable in water.

12.1 Mobility: In soil, adsorption to solid phase is possible. Information from a similar product.

12.2 Aquatic and terrestrial ecotoxicity: This material is not expected to be toxic to aquatic life. Information from a similar product.

12.3 Persistence and degradability: Not easily biodegradable. Easily eliminated from water. Information from a similar product.

12.4 Bioaccumulative and distribution potential: Low bioaccumulation and distribution is expected. Information from a similar product.

12.5 Other adverse effects: No other relevant information available

Section 13. Disposal Considerations

13.1 Disposal methods:

Uncontaminated discarded product is not a hazardous waste under RCRA. Do not dump into any sewers, on the ground or into any body of water. All disposal practices must comply with all federal, state, and local laws and regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service for disposal services.

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

13.2 Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residues. Puncture or otherwise destroy empty container and dispose of in a facility permitted for nonhazardous waste.

Section 14. Transport Information

14.1 When transported at <100 ° C, this product is not regulated.

14.2 UN number: Not regulated.

14.3 UN proper shipping name: Not regulated.

14.4 Transport hazard class: Not regulated.

14.5 Packing group (if applicable): Not regulated.

14.6 Marine Pollutant (Yes/No): No.

14.7 Special precaution: No information available.

Section 15. Regulatory Information

U.S. Regulations

15.1 USA TSCA: Listed on the TSCA Inventory.

15.2 SARA Section 311/312 Hazard Categories:

Acute Hazard: No

Chronic Hazard: No

Fire Hazard: Yes

Reactive Hazard: No

Sudden Pressure Release: No

15.3 CERCLA Hazardous Substance SARA Section 304 Release Reporting:

Component(s) Reportable Quantity

None

15.4 SARA Section 302 Extremely Hazardous Substances:

Component(s)/

CAS Number

Concentration

Min

Max

None

15.5 SARA Section 313 Toxic Chemicals:

Component(s)/

CAS Number

Reporting

Threshold

Concentration

Min

Max

None

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

15.6 California Proposition 65:

This product is not known to contain chemical(s) known to the State of California to cause cancer or reproductive harm.

15.7 Pennsylvania Worker and Community Right To Know Act:

Hazardous Substances: None

15.8 New Jersey Worker and Community Right To Know Act: None

Hazardous Substances: None

15.9 International Regulations:

EC/GHS classification

According to EC/GHS regulations, this product is not classified or labeled.

WHMIS Classification: This product is a WHMIS controlled product.

German Water Hazard Class: 0 - Not hazardous for water self-assessment.

Chemical Inventory

Canada: The ingredients of this product are on the DSL.

Europe: The ingredients of this product are on the EINECS inventory.

United States: The ingredients of this product are on the TSCA inventory.

Australia: The ingredients of this product are on the AICS inventory.

Japan: The ingredients of this product are on the ENCS inventory.

Korean Listed on KECL - Korean Existing and Evaluated Chemical Substances

Philippines Listed on PICCS Philippines Inventory of Chemicals and Chemical Substances

New Zealand Listed on NZIoC - New Zealand Inventory of Chemicals

Section 16. Other Information

16.1 NFPA and HMIS Hazard Ratings:

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, the customer must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product SDS. This information is intended solely for the use of individuals trained in the particular hazard rating system.

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

NFPA (National Fire Protection Association) - Classification

Health	1 least
Flammability	1 slight
Instability or Reactivity	0 minimal

HMIS® [Hazardous Materials Identification System (Paint & Coating)] - Classification

SAFETY DATA SHEET

UNITED PERFORMANCE MATERIALS CORPORATION

Sun-Tack C9 Petroleum Resin (All Grades)

GHS HCS-2012 §1910.1200

Health	1 least
Flammability	1 slight
Reactivity	0 minimal

NFPA, HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered. This information is supplied solely for the use of individuals trained in the particular hazard rating system.

16.2 Revision information: Date of the previous revision: 02/15/2015 Version 2

Date of this revision: 09/20/2015 (Version 3.0)

Revision summary: Revised GHS/OSHA compliant SDS

16.3 Training advice: Provide adequate information, instruction and training for operators.

16.4 Key or legend to abbreviations and acronyms used in the safety data sheet:

ACGIH	American Conference of Governmental Industrial Hygienists
BEI	Biological Exposure Index
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
NOAEL	No observed adverse effect level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
OECD	Organization for Economic Co-operation and Development
OPPTS	Office of Prevention, Pesticides, and Toxic Substances
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
ppm	parts per million
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted
Action Level	An exposure value set by OSHA that is lower than the PEL that will trigger the need for activities such as exposure monitoring and medical surveillance.

This Safety Data Sheet conforms to US GHS (Revision 3)/Hazcom 2012.

The opinions expressed herein are those of qualified experts within R.E. Carroll, Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of R.E. Carroll, Inc., it is the user's obligation to determine the conditions of safe use of the products.

END OF SDS
