

## SAFETY DATA SHEET

#### DDP SPECIALTY ELECTRONIC MATERIALS

US 9, LLC

Product name: MOLYKOTE<sup>®</sup> CU-7439 Plus Paste V1

Issue Date: 12/14/2020

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DDP SPECIALTY ELECTRONIC MATERIALS US 9, LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## **1. IDENTIFICATION**

Product name: MOLYKOTE® CU-7439 Plus Paste V1

Recommended use of the chemical and restrictions on use Identified uses: Lubricants and lubricant additives

COMPANY IDENTIFICATION DDP SPECIALTY ELECTRONIC MATERIALS US 9, LLC 974 Centre Road Wilmington DE 19805 UNITED STATES

**Customer Information Number:** 

833-338-7668 SDSQuestion-NA@dupont.com

EMERGENCY TELEPHONE NUMBER 24-Hour Emergency Contact: 1-800-424-9300 Local Emergency Contact: 800-424-9300

## 2. HAZARDS IDENTIFICATION

#### Hazard classification

GHS classification in accordance with 29 CFR 1910.1200 Skin irritation - Category 2 Eye irritation - Category 2A

Label elements Hazard pictograms



#### Signal word: WARNING!

#### Hazards

Causes skin irritation. Causes serious eye irritation.

#### **Precautionary statements**

#### Prevention

Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection.

#### Response

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

#### Other hazards

No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Inorganic and organic compounds in mineral oil This product is a mixture

Component	CASRN	Concentration
Solvent dewaxed residual oil (petroleum)	64742-62-7	>= 70.0 - < 80.0 %
Copper metal powder	7440-50-8	>= 10.0 - < 20.0 %
C12-C14-Alkyl amines, isooctyl phosphates	68187-67-7	>= 1.0 - < 5.0 %

## **4. FIRST AID MEASURES**

# Description of first aid measures General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Wash off with plenty of water.

**Eye contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay,

preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: No emergency medical treatment necessary.

#### Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

#### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## **5. FIREFIGHTING MEASURES**

**Suitable extinguishing media:** Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture Hazardous combustion products: Metal oxides Carbon oxides Nitrogen oxides (NOx)

**Unusual Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health.

#### Advice for firefighters

**Fire Fighting Procedures:** Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Do not release the product to the aquatic environment above defined regulatory levels Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Wipe up or scrape up and contain for salvage or disposal. 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. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. See sections: 7, 8, 11, 12 and 13.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not get on skin or clothing. Do not swallow. Do not get in eyes. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice.

Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Conditions for safe storage:** Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents. Unsuitable materials for containers: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
Solvent dewaxed residual oil	OSHA Z-1	TWA Mist	5 mg/m3
(petroleum)			-
	ACGIH	TWA Inhalable	5 mg/m3
		particulate matter	
	Further information: URT irr: Upper Respiratory Tract irritation; A4: Not classifiable as a human carcinogen		
	NIOSH REL	TWA Mist	5 mg/m3
	NIOSH REL	ST Mist	10 mg/m3
Copper metal powder	OSHA Z-1	TWA	1 mg/m3,Copper
	OSHA P0	TWA	1 mg/m3 , Copper
	OSHA Z-1	TWA	0.1 mg/m3 , Copper
	OSHA P0	TWA	0.1 mg/m3 , Copper
	ACGIH	TWA Dust and mist	1 mg/m3 , Copper
	Further information: irritatio fume fever	n: Irritation; GI: Gastrointesti	nal; metal fume fever: metal
	ACGIH	TWA Fumes	0.2 mg/m3 , Copper
	Further information: irritatio fume fever	n: Irritation; GI: Gastrointesti	nal; metal fume fever: metal
	OSHA Z-1	TWA dusts and mists	1 mg/m3 , Copper
	OSHA Z-1	TWA Fumes	0.1 mg/m3 , Copper

#### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

#### Individual protection measures

Eye/face protection: Use chemical goggles.

#### Skin protection

Hand protection: Use gloves chemically resistant to this material.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical statepasteColorbronzeOdorslightOdor ThresholdNo data availablepHNot applicableMelting point/rangeNo data availableFreezing pointNo data availableBoiling point (760 mmHg)No data availableFlash point>200 °C ( 392 °F) Tag closed cupEvaporation Rate (Butyl Acetate = 1)Not classified as a flammability hazardFlammability (solid, gas)Not classified as a flammability hazardLower explosion limitNo data availableVapor PressureNot applicableRelative Vapor Density (air = 1)No data availableRelative Density (water = 1)0.99
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Relative Vapor Density (air = 1) No data available
<b>Bolative Density (water <math>= 1</math>)</b> 0.00
Relative Density (water = 1) 0.99
Water solubility No data available
Partition coefficient: n- No data available
octanol/water
Auto-ignition temperature No data available
Decomposition temperature No data available
Kinematic Viscosity No data available
Explosive properties Not explosive

Oxidizing properties Molecular weight Particle size The substance or mixture is not classified as oxidizing. No data available No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

## **10. STABILITY AND REACTIVITY**

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Can react with strong oxidizing agents.

Conditions to avoid: None known.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: 1-Butene.

## 11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

#### Acute toxicity

Acute oral toxicity Product test data not available. Refer to component data.

#### Acute dermal toxicity

Product test data not available. Refer to component data.

#### Acute inhalation toxicity

Product test data not available. Refer to component data.

#### Skin corrosion/irritation

Product test data not available. Refer to component data.

#### Serious eye damage/eye irritation Product test data not available. Refer to component data.

#### Sensitization

Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Single Exposure) Product test data not available. Refer to component data.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

Product test data not available. Refer to component data.

#### Carcinogenicity

Product test data not available. Refer to component data.

#### Teratogenicity

Product test data not available. Refer to component data.

#### Reproductive toxicity

Product test data not available. Refer to component data.

#### Mutagenicity

Product test data not available. Refer to component data.

#### **Aspiration Hazard**

Product test data not available. Refer to component data.

#### COMPONENTS INFLUENCING TOXICOLOGY:

#### Solvent dewaxed residual oil (petroleum)

Acute oral toxicity LD50, Rat, male and female, > 5,000 mg/kg

Acute dermal toxicity LD50, Rabbit, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity LC50, Rat, male and female, 4 Hour, dust/mist, > 5.53 mg/l No deaths occurred at this concentration.

## Skin corrosion/irritation

Prolonged contact may cause moderate skin irritation with local redness.

#### Serious eye damage/eye irritation

May cause slight temporary eye irritation. Corneal injury is unlikely.

#### Sensitization

Did not cause allergic skin reactions when tested in guinea pigs. Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization: No relevant data found.

#### Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

In animals, effects have been reported on the following organs: Liver.

#### Carcinogenicity

No relevant information found.

#### Teratogenicity

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

#### **Reproductive toxicity**

In animal studies, did not interfere with reproduction.

#### Mutagenicity

In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

#### Aspiration Hazard

Based on available information, aspiration hazard could not be determined.

#### Copper metal powder

#### Acute oral toxicity

LD50, Rat, > 2,500 mg/kg OECD Test Guideline 423 No deaths occurred at this concentration.

#### Acute dermal toxicity

LD50, Rat, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

#### Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, > 5.11 mg/l OECD Test Guideline 436 No deaths occurred at this concentration.

#### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

#### Serious eye damage/eye irritation

May cause slight eye irritation. May cause slight corneal injury.

#### Sensitization

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

#### Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

#### Carcinogenicity

No relevant data found.

#### Teratogenicity

Did not cause birth defects or any other fetal effects in laboratory animals.

#### **Reproductive toxicity**

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

#### Mutagenicity

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

#### C12-C14-Alkyl amines, isooctyl phosphates

Acute oral toxicity LD50, Rat, 500 - 1,000 mg/kg OECD Test Guideline 423

#### Acute dermal toxicity

Based on data from similar materials LD50, Rabbit, > 4,000 mg/kg

#### Skin corrosion/irritation

Corrosive after 3 minutes to 1 hour of exposure

#### Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

#### Sensitization

negative

## **12. ECOLOGICAL INFORMATION**

Ecotoxicological information appears in this section when such data is available.

#### Toxicity

#### Solvent dewaxed residual oil (petroleum)

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LL50, Pimephales promelas (fathead minnow), Static, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

#### Acute toxicity to aquatic invertebrates

LL50, scud Gammarus sp., semi-static test, 48 Hour, > 10,000 mg/l, OECD Test Guideline 202 or Equivalent

EL50, water flea Daphnia magna, Static, 48 Hour, > 10,000 mg/l, OECD Test Guideline 202 or Equivalent

#### Acute toxicity to algae/aquatic plants

NOEC, green alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum), Static, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

#### Toxicity to bacteria

Based on data from similar materials NOEC, 10 min, > 1.93 mg/l

Chronic toxicity to aquatic invertebrates NOEC, Daphnia magna, semi-static test, 21 d, number of offspring, 10 mg/l

#### Copper metal powder

#### Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species). LC50, 96 Hour, 8.1  $\mu$ g/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.792 mg/l

Acute toxicity to algae/aquatic plants

EC50, Chlorella vulgaris (Fresh water algae), 72 Hour, 0.333 mg/l, OECD Test Guideline 201

#### Chronic toxicity to fish

NOEC, Oncorhynchus mykiss (rainbow trout), 1 µg/l

#### C12-C14-Alkyl amines, isooctyl phosphates

Acute toxicity to fish LC50, 96 Hour, > 1 - 10 mg/l, OECD Test Guideline 203

#### Persistence and degradability

#### Solvent dewaxed residual oil (petroleum)

**Biodegradability:** Based on information for a similar material: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

#### Copper metal powder

**Biodegradability:** Biodegradability is not applicable to inorganic substances.

#### C12-C14-Alkyl amines, isooctyl phosphates

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines. **Biodegradation:** 62 % **Exposure time:** 28 d **Method:** OECD Test Guideline 301C

#### **Bioaccumulative potential**

#### Solvent dewaxed residual oil (petroleum) Bioaccumulation: No relevant data found.

#### Copper metal powder

Bioaccumulation: No relevant data found.

#### Mobility in soil

#### Solvent dewaxed residual oil (petroleum)

No relevant data found.

#### **Copper metal powder**

No relevant data found.

## **13. DISPOSAL CONSIDERATIONS**

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section10 **Regulatory Information, MSDS Section 15** 

Treatment and disposal methods of used packaging: Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

## **14. TRANSPORT INFORMATION**

DOT

Class

Class

Proper shipping name Environmentally hazardous substance, solid, n.o.s.(Copper metal powder) UN 3077 **UN number** 9 Ш Packing group Marine pollutant Copper metal powder

#### Classification for SEA transport (IMO-IMDG):

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Copper metal powder) **UN number** UN 3077 9 Packing group Ш Marine pollutant Copper metal powder Transport in bulk Consult IMO regulations before transporting ocean bulk according to Annex I or II of MARPOL 73/78 and the **IBC or IGC Code** 

#### Classification for AIR transport (IATA/ICAO):

Proper shipping name

Environmentally hazardous substance, solid, n.o.s.(Copper metal powder)

UN number	UN 3077
Class	9
Packing group	III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## **15. REGULATORY INFORMATION**

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Skin corrosion or irritation Serious eye damage or eye irritation Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 The following components are subject to reporting levels established by SARA Title III, Section 313: Components Copper metal powder Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

Calculated RQ exceeds reasonably attainable	e upper limit.	
Components	CASRN	RQ (RCRA Code)
Copper metal powder	7440-50-8	5000 lbs RQ

#### Pennsylvania Right To Know

The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components	CASRN
Solvent dewaxed residual oil (petroleum)	64742-62-7
Copper metal powder	7440-50-8

#### California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

#### Hazard Rating System

#### NFPA

	Health	Flammability	Instability	
	2	1	0	
HMIS				
	Health	Flammability	Physical Hazard	
	2/	1	0	

#### Revision

Identification Number: 12026109 / A776 / Issue Date: 12/14/2020 / Version: 2.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

#### Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)	
NIOSH REL	USA. NIOSH Recommended Exposure Limits	
OSHA P0	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air	
	Contaminants	
ST	STEL - 15-minute TWA exposure that should not be exceeded at any time during	
	a workday	
TWA	8-hour time weighted average	

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT -Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO -International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 -Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC)

No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DDP SPECIALTY ELECTRONIC MATERIALS US 9, LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDS sobtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

US