









# **SAFETY DATA SHEET**

DDP SPECIALTY ELECTRONIC MATERIALS US, INC.

Product name: BETAFORCE™ 2850L PolC BComp Issue Date: 10/17/2018
Print Date: 05/14/2020

DDP SPECIALTY ELECTRONIC MATERIALS US, INC. 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: BETAFORCE™ 2850L PolC BComp

Recommended use of the chemical and restrictions on use Identified uses: An adhesive -- For use in automotive applications.

## **COMPANY IDENTIFICATION**

DDP SPECIALTY ELECTRONIC MATERIALS US, INC. 400 ARCOLA ROAD COLLEGEVILLE PA 19426-2914 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 Not a hazardous substance or mixture.

#### Other hazards

No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component CASRN Concentration

Glycerol, propylene oxide, ethylene oxide polymer

Clay, calcined china

92704-41-1

> 40.0 - < 50.0 %

Butylene glycol (1,4-butanediol)

110-63-4

< 10.0 %

Dimethyl siloxane, reaction product with silica

67762-90-7

< 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.

Product name: BETAFORCE™ 2850L PolC BComp

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

#### 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 fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

Special hazards arising from the substance or mixture

Page 2 of 13

Issue Date: 10/17/2018

**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. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

## Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with materials such as: Cat litter. Sand. Sawdust. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Store in accordance with good manufacturing practices.

Page 3 of 13

## Storage stability

### Storage temperature:

## 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/Notation
Butylene glycol (1,4-	Dow IHG	TWA	10 mg/m3
butanediol)			

#### **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 safety glasses (with side shields). **Skin protection** 

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**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 handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical state Paste

Page 4 of 13

**Color** White

**Odor** Characteristic

Odor Threshold

pH

No test data available

No test data available

Melting point/range

No test data available

Flash point closed cup No test data available

**Evaporation Rate (Butyl Acetate** 

= 1)

No test data available

**Flammability (solid, gas)**The product is not flammable.

Lower explosion limitNo test data availableUpper explosion limitNo test data availableVapor PressureNo test data availableRelative Vapor Density (air = 1)No test data availableRelative Density (water = 1)1.45 Calculated.

Water solubility

No test data available

Partition coefficient: n
No data available

octanol/water

Auto-ignition temperatureNo test data availableDecomposition temperatureNo data availableKinematic ViscosityNo test data availableExplosive propertiesNo test data availableOxidizing propertiesNo test data availableMolecular weightNo data availableVolatile Organic CompoundsNo test data available

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

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions: Will not occur by itself.

**Conditions to avoid:** Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible materials:** Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat.

Page 5 of 13

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon dioxide. Alcohols. Ethers. Hydrocarbons. Ketones. Polymer fragments.

#### 11. TOXICOLOGICAL INFORMATION

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

## **Acute toxicity**

#### **Acute oral toxicity**

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

Single dose oral LD50 has not been determined.

## **Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

The dermal LD50 has not been determined.

#### Acute inhalation toxicity

At room temperature, exposure to vapor is minimal due to low volatility; vapor from heated material may cause respiratory irritation. This material contains mineral and/or inorganic fillers. There is essentially no potential for inhalation exposure to these fillers incidental to industrial handling due to the physical state.

The LC50 has not been determined.

#### Skin corrosion/irritation

Prolonged contact may cause skin irritation with local redness.

Material may stick to skin causing irritation upon removal.

### Serious eye damage/eye irritation

May cause slight eye irritation.

May cause slight temporary corneal injury.

#### Sensitization

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization 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)**

Contains component(s) which have been reported to cause effects on the following organs in animals: Thymus.

Lung.

Central nervous system.

Bladder.

#### Carcinogenicity

Page 6 of 13

NTP has concluded that 1,4-butanediol should be considered not carcinogenic in animals.

## **Teratogenicity**

Contains component(s) which did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

#### Reproductive toxicity

Contains component(s) which did not interfere with reproduction in animal studies. Contains component(s) which did not interfere with fertility in animal studies.

#### Mutagenicity

Contains a component(s) which were negative in in vitro genetic toxicity studies.

#### **Aspiration Hazard**

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

## COMPONENTS INFLUENCING TOXICOLOGY:

#### Glycerol, propylene oxide, ethylene oxide polymer

#### Acute oral toxicity

Typical for this family of materials. LD50, Rat, > 2,000 mg/kg Estimated. No deaths occurred at this concentration.

#### Acute dermal toxicity

Typical for this family of materials. LD50, Rabbit, > 2,000 mg/kg Estimated.

#### Acute inhalation toxicity

The LC50 has not been determined.

## Clay, calcined china

#### Acute oral toxicity

For similar material(s): LD50, Rat, male and female, > 5,000 mg/kg Other No deaths occurred at this concentration.

#### Acute dermal toxicity

For similar material(s): LD50, Rat, male and female, > 5,000 mg/kg Other guidelines No deaths occurred at this concentration.

## Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, dust/mist, > 2.07 mg/l No deaths occurred at this concentration.

#### **Butylene glycol (1,4-butanediol)**

#### Acute oral toxicity

In animals, effects have been reported on the following organs: Central nervous system. Observations in animals include: Narcotic effects. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. LD50, Rat, >1,500 mg/kg

## Acute dermal toxicity

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

## Acute inhalation toxicity

Page 7 of 13

LC50, Rat, 4 Hour, dust/mist, > 5.1 mg/l The LC50 value is greater than the Maximum Attainable Concentration.

## Dimethyl siloxane, reaction product with silica

#### Acute oral toxicity

LD50, Rat, > 5,000 mg/kg OECD 401 or equivalent No deaths occurred at this concentration.

#### Acute dermal toxicity

LD50, Rat, > 2,000 mg/kg OECD Test Guideline 402

### Acute inhalation toxicity

For similar material(s): LC50, Rat, 4 Hour, dust/mist, > 0.477 mg/l

## 12. ECOLOGICAL INFORMATION

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

## **Toxicity**

## Glycerol, propylene oxide, ethylene oxide polymer

#### Acute toxicity to fish

For this family of materials:

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).

### Acute toxicity to aquatic invertebrates

For this family of materials:

LC50, Daphnia magna (Water flea), static test, 48 Hour, 384 mg/l

#### Acute toxicity to algae/aquatic plants

For this family of materials:

ErC50, alga Scenedesmus sp., static test, 72 Hour, Growth rate, > 100 mg/l

#### Clay, calcined china

## 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).

## Acute toxicity to aquatic invertebrates

Based on data from similar materials

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202

#### Acute toxicity to algae/aquatic plants

Based on data from similar materials

EC50, Desmodesmus subspicatus (green algae), 72 Hour, 2,500 mg/l, OECD Test Guideline 201

#### Toxicity to bacteria

Based on data from similar materials

EC50, Pseudomonas putida, 16 Hour, 2,800 mg/l

#### Chronic toxicity to fish

Page 8 of 13

NOEC, Oncorhynchus mykiss (rainbow trout), 30 d, 100 mg/l

### Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOEC, Daphnia magna (Water flea), 21 d, 1,000 mg/l

## **Butylene glycol (1,4-butanediol)**

## 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). LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, > 30,000 mg/l, OECD Test Guideline 203 or Equivalent

## Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 813 mg/l, OECD Test Guideline 202 or Equivalent

## Acute toxicity to algae/aquatic plants

EbC50, alga Scenedesmus sp., 72 Hour, Biomass, > 1,000 mg/l, OECD Test Guideline 201 or Equivalent

## Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, > 85 mg/l

## Dimethyl siloxane, reaction product with silica

#### 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). LC50, zebra fish (Brachydanio rerio), 96 Hour, > 1,000 mg/l, OECD Test Guideline 203

### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 1,000 mg/l, OECD Test Guideline 202

## Persistence and degradability

## Glycerol, propylene oxide, ethylene oxide polymer

**Biodegradability:** For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

## Clay, calcined china

Biodegradability: Biodegradation is not applicable.

#### **Butylene glycol (1,4-butanediol)**

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. 10-day Window: Pass Biodegradation: 96 % Exposure time: 14 d

Method: OECD Test Guideline 301A or Equivalent

Theoretical Oxygen Demand: 1.95 mg/mg

**Photodegradation** 

Page 9 of 13

**Test Type:** Half-life (indirect photolysis)

**Sensitization:** OH radicals **Atmospheric half-life:** 0.959 d

Method: Estimated.

## Dimethyl siloxane, reaction product with silica

**Biodegradability:** Biodegradation is not applicable.

## **Bioaccumulative potential**

## Glycerol, propylene oxide, ethylene oxide polymer

**Bioaccumulation:** For this family of materials: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

### Clay, calcined china

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### **Butylene glycol (1,4-butanediol)**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): -0.88 Measured

Bioconcentration factor (BCF): 3.16 Fish Estimated.

### Dimethyl siloxane, reaction product with silica

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

## Mobility in soil

### Glycerol, propylene oxide, ethylene oxide polymer

No relevant data found.

## Clay, calcined china

No relevant data found.

#### **Butylene glycol (1,4-butanediol)**

Potential for mobility in soil is very high (Koc between 0 and 50).

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Partition coefficient (Koc): 1 Estimated.

## Dimethyl siloxane, reaction product with silica

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

Page 10 of 13

UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

**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

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport
Consult IMO regulations before transporting ocean bulk

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

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) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

This material does not contain any components with a CERCLA RQ.

Pennsylvania (Worker and Community Right-To-KnowAct): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Page 11 of 13

#### 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
1	0	0

#### Revision

Identification Number: 11002814 / A749 / Issue Date: 10/17/2018 / Version: 4.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

## Legend

Dow IHG	Dow Industrial Hygiene Guideline
TWA	Time weighted average

## Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances: 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

Page 12 of 13

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, INC. 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)SDSs obtained 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







6550 Oley Speaks Way Canal Winchester, OH 43110



www.RudolphBros.Com RBCsupport@RudBro.Com