

Material Safety Data Sheet

Revision Date 19-Mar-2014

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code P57827A

Product name Conductaloy Epoxy - Part A

Recommended Use Repair Material

Supplier Kent Automotive

8770 W.Bryn Mawr Ave.- Suite 900

Chicago, IL 60631 1-866-529-7664

Emergency telephone number

(888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview

Flammable, Irritant,

Aggravated Medical Conditions

Pre-existing heart conditions. Pre-existing skin, eye, or respiratory conditions may be aggravated by exposure to this product.

Principal Routes of Exposure

Eyes. Skin. Ingestion. Inhalation.

Potential health effects

Eyes Irritation. Severity depends on degree of exposure.

Skin Redness. Swelling. Sensitization. Allergic reaction...

Inhalation If fumes are generated by heating to high

temperatures, acute symptoms are. Headaches. Nausea. Dizziness. Harmful by inhalation.

Drowsiness . Respiratory irritation.

Ingestion Harmful if swallowed. Toxic if swallowed

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|--|------------|----------|
| Silver | 7440-22-4 | 60-100 |
| Bisphenol A - Epichlorohydrin polymer | 25068-38-6 | 10-30 |
| Modified Epoxy Ester | Mixture | 1-5 |

4. FIRST AID MEASURES

Eye contact Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation

persists, consult a specialist.

Skin contact Remove and wash contaminated clothing before

re-use. Wash off immediately with soap and plenty of water. Seek medical attention if irritation persists.

Ingestion Drink 1 or 2 glasses of water. Do Not induce

vomiting.

Inhalation Remove from exposure. Provide oxygen if

breathing is difficult. Call a physician. Administer artificial respiration if not breathing. Call a physician

mmediately.

5. FIRE FIGHTING MEASURES

Flash point °C > 93 Flash point °F > 200

Method Tag Closed Cup

Autoignition temperature °C No data available No data available No data available

Flammability Limits (% in Air)

Upper No data available Lower No data available

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water. Foam.

Special protective equipment for firefighters

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

Special Fire-Fighting Procedures

Firefighters should wear NIOSH/MSHA approved (or equivalent) selfcontained pressure-demand breathing apparatus and full protective clothing.

Fire and Explosion Hazards

Water should be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Containers may vent or burst under extreme or prolonged fire conditions.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Personnel should wear appropriate protective equipment. Follow all precautions for handling. Please refer to appropriate sections of MSDS for additional information. Eliminate all sources of ignition. Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Place in suitable container for disposal as hazardous waste.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Thoroughly wash hands and exposed skin after handling. Check to make sure that all equipment is properly grounded and installed to satisfy electrical classification requirements. Keep container closed when not in use.

Storage

Keep away from direct sunlight. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name | OSHA PEL (TWA) | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|--|------------------------|-----------------------|-----------------------|---------------------|
| Silver | 0.01 mg/m ³ | - | 0.1 mg/m ³ | (#E) |
| Bisphenol A - Epichlorohydri n polymer | P | 3 4 10 | - | (w) |
| Modified Epoxy Ester | | , | 1700 | 151 |

Ventilation and Environmental Controls

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. Local: as necessary.

Hygiene measures

General industrial hygiene practice.

Respiratory protection

Use NIOSH approved respirator if TLV limit is exceeded.

Hand Protection

Chemical resistant gloves. Rubber gloves.

Eye protection

Safety glasses with side-shields.

Skin and body protection

None necessary under normal conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

 Form
 Liquid

 Color
 Silver / Gray

 Odor
 Mild

Odor Threshold No information available

pH No data available

Specific Gravity 4.0

Vapor pressure < 1.0 mmHg Vapor density > 1 (Air=1) Evaporation Rate No data available

Water solubility 10% VOC Content < 0.5

Partition Coefficient No data available

(n-octanol/water)

Boiling point/range °C > 93 Boiling point/range °F > 200

Melting point/range °C No data available
Melting point/range °F No data available

Flash point °C > 93Flash point °F > 200

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Do not store above 120 degrees F. Avoid direct sunlight. Do not store or use near incompatible materials.

Incompatability

Strong oxidizing agents. Copper. Copper alloys. Iron. Strong acids. Strong bases. Caustics. Amines. Alkalies. Mercaptans.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide.

Polymerization

Will occur.

11. TOXICOLOGICAL INFORMATION

Component Information

| Chemical Name | | LD50 (dermal ,rat/rab bit) | LC50 (inhalation,rat) |
|---|---------------|-------------------------------------|-----------------------|
| Silver 7440-22-4 | 2000 mg/kg | 72 | - |
| Bisphenol A - Epichlorohydrin polymer 25068-38-6 | - | z= | - |
| Modified Epoxy Ester Mixture | = | 2.5 | - |

Synergistic Products

None known

Potential health effects

Sensitization None known
Chronic toxicity None known
Mutagenic effects None known
Teratogenic effects None known
Reproductive toxicity None known
Target Organ Effects See Section 2

Carcinogenic effects See table below

| Chemical Name | ACGIH OEL - Carcinoge ns | IARC | NTP - Known Carcinoge ns | NTP - Suspected Human Carcinoge ns | OSHA RTK Carcinoge ns |
|--|-----------------------------------|------------|-----------------------------------|--|--------------------------------|
| Silver | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed |
| Bisphenol A - Epichlorohydri n polymer | | Not Listed | Not Listed | Not Listed | Not Listed |
| Modified Epoxy Ester | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed |

12. ECOLOGICAL INFORMATION

Silver

Water Flea Data

Daphnia magna EC50=0.00024 mg/L (48 h)

Aquatic toxicity Do not let product enter drains.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products

Dispose in accordance with federal, state, and local regulations.

Bioaccumulation

Water contamination should be avoided

14. TRANSPORTATION INFORMATION

DOT

Not Regulated

TDG

Not Regulated

15. REGULATORY INFORMATION

| Chemical Name | US EPA SARA 313 Emission Reporting | |
|---------------|------------------------------------|--|
| Silver | Listed | |

State Regulations

| Chemical Name | New Jersey - RTK | Pennsylvania - RTK | California Prop. 65 |
|--|---------------------|-----------------------|------------------------|
| Silver | Listed | Listed | - |
| Bisphenol A - Epichlorohydrin polymer | Not Listed | Not Listed | Not Listed |
| Modified Epoxy Ester | Not Listed | Not Listed | Not Listed |

International Inventories

| Chemical Name | EINECS | DSL | NDSL | TSCA |
|--|--------|-----|------------|----------|
| Silver | Х | Х | | Х |
| Bisphenol A - Epichlorohydrin polymer | 1=1 | Х | 1 9 | Х |
| Modified Epoxy Ester | - | * | - | * |

CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

NFPA NFPA

Health - 3

Flammability - 1

Reactivity - 1

HMIS HMIS

Health - 3

Flammability - 1

Physical Hazard - 1

Prepared By V. Shargorodsky, Regulatory Affairs

Engineer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.



Material Safety Data Sheet

Revision Date 19-Mar-2014

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code P57827B

Product name Conductaloy Epoxy - Part B

Recommended Use Repair Material

Supplier Kent Automotive

8770 W.Bryn Mawr Ave.- Suite 900

Chicago, IL 60631 1-866-529-7664

Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview

Irritant

Aggravated Medical Conditions

Pre-existing heart conditions. Pre-existing skin, eye, or respiratory conditions may be aggravated by exposure to this product.

Principal Routes of Exposure

Eyes. Skin. Ingestion. Inhalation.

Potential health effects

Eyes Chemical burns. Irreversible damage to eyes.

Skin Chemical burns. Sensitization. Allergic reaction.

Inhalation Harmful by inhalation. Respiratory irritation.

Sensitization. May cause allergic respiratory

reaction.

Ingestion Harmful if swallowed. Chemical burns.

Gastrointestinal irritation. Toxic if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|-----------------------------|-----------|----------|
| Silver | 7440-22-4 | 60-100 |
| 1-(2-Aminoethyl) piperazine | 140-31-8 | 10-30 |

4. FIRST AID MEASURES

Eye contact Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation

persists, consult a specialist.

Skin contact Remove and wash contaminated clothing before

re-use. Wash off immediately with soap and plenty of water. Seek medical attention if irritation persists.

Ingestion Give victim a glass of milk. Seek medical attention

immediately.

Inhalation Remove from exposure. Provide oxygen if

breathing is difficult. Call a physician. Administer artificial respiration if not breathing. Call a physician

immediately.

5. FIRE FIGHTING MEASURES

Flash point °C > 93 Flash point °F > 200

Method Tag Closed Cup

Autoignition temperature °C No data available
Autoignition temperature °F No data available

Flammability Limits (% in Air)

Upper No data available

Lower 0.

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water. Foam.

Special protective equipment for firefighters

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

Special Fire-Fighting Procedures

Firefighters should wear NIOSH/MSHA approved (or equivalent) self-contained pressure-demand breathing apparatus and full protective clothing.

Fire and Explosion Hazards

Water should be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Containers may vent or burst under extreme or prolonged fire conditions.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Personnel should wear appropriate protective equipment. Follow all precautions for handling. Please refer to appropriate sections of MSDS for additional information. Eliminate all sources of ignition. Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Place in suitable container for disposal as hazardous waste.

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Thoroughly wash hands and exposed skin after handling. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use.

Storage

Keep away from direct sunlight. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name | OSHA PEL (TWA) | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|------------------------------------|------------------------|-----------------------|-----------------------|---------------------|
| Silver | 0.01 mg/m ³ | | 0.1 mg/m ³ | (-) |
| 1-(2- Aminoethyl) piperazine | + | H | # | Ε. |

Ventilation and Environmental Controls

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. Local: as necessary.

Hygiene measures

General industrial hygiene practice.

Respiratory protection

Use NIOSH approved respirator if TLV limit is exceeded.

Hand Protection

Chemical resistant gloves. Rubber gloves.

Eye protection

Safety glasses with side-shields.

Skin and body protection

None necessary under normal conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid
Color Silver / Gray
Odor Amine-like

Odor Threshold No information available

pH No data available

Specific Gravity 4.0-4.2
Vapor pressure < 1.0 mmHg
Vapor density > 1 (Air=1)
Evaporation Rate < 1 (ether = 1)

Water solubility 10% VOC Content 0

Partition Coefficient No data available

(n-octanol/water)

Boiling point/range °C > 93 Boiling point/range °F > 200

Melting point/range °C No data available
Melting point/range °F No data available

Flash point °C > 93 Flash point °F > 200

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid extreme heat.

Incompatability

Epoxy resin. Isocyanates. Alkalies. Caustics. Mineral acids. Strong acids. Strong bases.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx).

Polymerization

Will occur.

11. TOXICOLOGICAL INFORMATION

Component Information

| Chemical Name | LD50 (oral,rat) | LD50 (dermal ,rat/rab bit) | LC50 (inhalation,rat) |
|--|------------------------|-------------------------------------|-----------------------|
| Silver 7440-22-4 | 2000 mg/kg | 0000 | - |
| 1-(2-Aminoethyl) piperazine 140-31-8 | 2140 mg/kg | 880 µL/kg | - |

Synergistic Products None known

Potential health effects

Sensitization None known
Chronic toxicity None known
Mutagenic effects None known
Teratogenic effects None known
Reproductive toxicity None known

Product name Conductaloy Epoxy - Part B

Target Organ Effects See Section 2

Carcinogenic effects See table below

| Chemical Name | ACGIH OEL - Carcinoge ns | IARC | NTP - Known Carcinoge ns | NTP - Suspected Human Carcinoge ns | OSHA RTK Carcinoge ns |
|------------------------------------|-----------------------------------|------------|-----------------------------------|--|--------------------------------|
| Silver | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed |
| 1-(2- Aminoethyl) piperazine | Not Listed | Not Listed | Not Listed | Not Listed | Not Listed |

12. ECOLOGICAL INFORMATION

Silver

Water Flea Data

Daphnia magna EC50=0.00024 mg/L (48 h)

1-(2-Aminoethyl) piperazine

Microtox Data

Pseudomonas putida EC50>10000 mg/L (17 h)

Water Flea Data

Daphnia magna EC50=32 mg/L (48 h)

Aquatic toxicity Do not let product enter drains.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products

Dispose in accordance with federal, state, and local regulations.

Bioaccumulation

Water contamination should be avoided

14. TRANSPORTATION INFORMATION

DOT

Not Regulated

TDG

Not Regulated

15. REGULATORY INFORMATION

| Chemical Name | US EPA SARA 313 Emission Reporting | |
|---------------|------------------------------------|--|
| Silver | Listed | |

State Regulations

| Chemical Name | New Jersey - RTK | Pennsylvania - RTK | California Prop. 65 |
|-----------------------------|---------------------|-----------------------|------------------------|
| Silver | Listed | Listed | |
| 1-(2-Aminoethyl) piperazine | Listed | Listed | Not Listed |

International Inventories

| Chemical Name | EINECS | DSL | NDSL | TSCA |
|-----------------------------|---------------|-----|------|------|
| Silver | Х | Х | 140 | Х |
| 1-(2-Aminoethyl) piperazine | Х | Х | - | Х |

CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

NFPA NFPA

Health - 3

Flammability - 1

Reactivity - 0

HMIS HMIS

Health - 3

Flammability - 1

Physical Hazard - 0

Prepared By

V. Shargorodsky, Regulatory Affairs

Engineer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.