



Safety Data Sheet
 prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 117P91NL
- Product Name:** PLASITE 4500 CARTRIDGE KIT **Revision Date:** 05/30/2015
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** No Information **Supercedes Date:** 29/05/2015
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Company
 2150 Schuetz Road
 St. Louis, MO USA 63146
- Regulatory / Technical Information:
 Contact Carboline Technical Services at
 1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - ehs@stoncor.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
 CHEMTREC +1 703 5273887 (Outside US)
 HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification

2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, Chronic, category 2
 Carcinogenicity, category 1A
 STOT, repeated exposure, category 2
 STOT, single exposure, category 2
 STOT, single exposure, category 3, RTI
 Skin Corrosion, category 1
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

BISPHENOL A, DIETHYLENETRIAMINE, ISOPHORONEDIAMINE, MICA, MICROCRYSTALLINE SILICA, EPOXY RESIN, ALKYL GLYCIDYL ETHER

GHS HAZARD STATEMENTS

| | | |
|-----------------------------------------------------------|---------|--------------------------------------------------------------------|
| Skin Corrosion, category 1 | H314-1 | Causes severe skin burns and eye damage. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation. |
| Carcinogenicity, category 1A | H350-1A | May cause cancer. |
| STOT, single exposure, category 2 | H371 | May cause damage to organs. |
| STOT, repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |

GHS PRECAUTION PHRASES

| | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | Wear respiratory protection. |
| P301+310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| P303+361+353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P308+313 | IF exposed or concerned: Get medical advice/attention |
| P309+P311 | IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. |
| P314 | Get medical advice/attention if you feel unwell. |
| P333+313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P391 | Collect spillage. |

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients**3.2 Mixtures****Hazardous Ingredients**

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>%</u> |
|----------------|-------------------------|----------|
| 25068-38-6 | EPOXY RESIN | 50-75 |
| 68609-97-2 | ALKYL GLYCIDYL ETHER | 10-25 |
| 12001-26-2 | MICA | 10-25 |
| 100-51-6 | BENZYL ALCOHOL | 2.5-10 |
| 111-40-0 | DIETHYLENTRIAMINE | 2.5-10 |
| 13463-67-7 | TITANIUM DIOXIDE | 2.5-10 |
| 67762-90-7 | HYDROPHOBIC SILICA | 2.5-10 |
| 2855-13-2 | ISOPHORONEDIAMINE | 1.0-2.5 |
| 80-05-7 | BISPHENOL A | 1.0-2.5 |
| 14808-60-7 | MICROCRYSTALLINE SILICA | 1.0-2.5 |
| 68609-08-5 | AMINE ADDUCT | 1.0-2.5 |
| 103-83-3 | ALIPHATIC AMINE | 0.1-1.0 |

| <u>CAS-No.</u> | <u>GHS Symbols</u> | <u>GHS Hazard Statements</u> | <u>M-Factors</u> |
|----------------|-------------------------|------------------------------|------------------|
| 25068-38-6 | GHS07-GHS09 | H315-317-319-335-411 | 0 |
| 68609-97-2 | GHS07 | H315-317-335 | 0 |
| 12001-26-2 | GHS07 | H319-335 | 0 |
| 100-51-6 | GHS07 | H302-312-319-332 | 0 |
| 111-40-0 | GHS05-GHS07 | H302-312-314-317-331 | 0 |
| 13463-67-7 | | | 0 |
| 67762-90-7 | | | 0 |
| 2855-13-2 | GHS05-GHS07 | H302-312-314-317-412 | 0 |
| 80-05-7 | GHS05-GHS07-GHS08-GHS09 | H317-318-335-361-411 | 0 |
| 14808-60-7 | GHS08 | H350-370 | 0 |
| 68609-08-5 | GHS09 | H411 | 0 |
| 103-83-3 | GHS02-GHS05-GHS07 | H226-302-312-314-332-412 | 0 |

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures**4.1 Description of First Aid Measures**

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Vapors may spread long distances and ignite.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Evacuate personnel to safe areas. Use NIOSH approved respiratory protection. Use water spray to cool unopened containers.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

| Name | % | ACGIH TLV- TWA | ACGIH TLV- STEL | OSHA PEL- TWA | OSHA PEL- CEILING | OEL Note |
|-------------------------|---------|-----------------------------|--------------------|------------------|----------------------|----------|
| EPOXY RESIN | 50-75 | N/E | N/E | N/E | N/E | |
| ALKYL GLYCIDYL ETHER | 10-25 | N/E | N/E | N/E | N/E | |
| MICA | 10-25 | 3 MGM3 | N/E | 3 MGM3 | N/E | |
| BENZYL ALCOHOL | 2.5-10 | N/E | N/E | N/E | N/E | |
| DIETHYLENETRIAMINE | 2.5-10 | 1 PPM | N/E | 4 MGM3 | N/E | |
| TITANIUM DIOXIDE | 2.5-10 | 10 MGM3 | N/E | 10 MGM3 | N/E | |
| HYDROPHOBIC SILICA | 2.5-10 | 10 MG/M3, INHALABLE | N/E | 6 MG/M3 | N/E | |
| ISOPHORONEDIAMINE | 1.0-2.5 | N/E | N/E | N/E | N/E | |
| BISPHENOL A | 1.0-2.5 | N/E | N/E | N/E | N/E | |
| MICROCRYSTALLINE SILICA | 1.0-2.5 | 0.025 MG/M3 (respirable) | N/E | 0.1 MG/M3 | N/E | |
| AMINE ADDUCT | 1.0-2.5 | N/E | N/E | N/E | N/E | |
| ALIPHATIC AMINE | 0.1-1.0 | N/E | N/E | N/E | N/E | |

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves Request information on glove permeation properties from the glove supplier.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location. Lightweight protective clothing

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Use only in an area equipped with explosion proof exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|-------------------------------------|------------------------------|
| Appearance: | White Or Grey Liquid |
| Physical State | Liquid |
| Odor | Epoxy |
| Odor threshold | |
| pH | N/D |
| Melting point / freezing point (°C) | N/D |
| Boiling point/range (°C) | 149 F (65 C) - 500 F (260 C) |
| Flash Point, (°C) | 95 |

Evaporation rate**Flammability (solid, gas)**

Upper/lower flammability or explosive limits Not determined

Vapour Pressure, mmHg N/D

Vapour density**Relative density**

Solubility in / Miscibility with water N/D

Partition coefficient: n-octanol/water**Auto-ignition temperature (°C)****Decomposition temperature (°C)****Viscosity****Explosive properties****Oxidising properties****9.2 Other information**

VOC Content g/l: 18

Specific Gravity (g/cm3) app. 1.21

10. Stability and Reactivity**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

| | |
|------------------|-----|
| Oral LD50: | N/D |
| Inhalation LC50: | N/D |

Irritation:

Corrosivity:

Sensitization:

Repeated dose toxicity:

Carcinogenicity:

Mutagenicity:

Toxicity for reproduction:

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|-------------------------|-------------------------|-----------------------------|----------------------------------|
| 25068-38-6 | EPOXY RESIN | 11400 mg/kg, rat, oral | 23000 mg/kg, dermal, rabbit | >20 mL/kg skin, sensitizer |
| 68609-97-2 | ALKYL GLYCIDYL ETHER | 17100 mg/kg, oral, rat | | Not Available |
| 12001-26-2 | MICA | Not Available | | Not Available |
| 100-51-6 | BENZYL ALCOHOL | 1230 mg/kg rat, oral | 2000 mg/kg, dermal, rabbit | 1000 ppm / 8 hrs rat, inhalation |
| 111-40-0 | DIETHYLENETRIAMINE | 1080 mg/kg, oral, rat | | 10 mg/L / 1 hour, inh, rat |
| 13463-67-7 | TITANIUM DIOXIDE | 25000 mg/m3, oral (rat) | | Not Available |
| 67762-90-7 | HYDROPHOBIC SILICA | 6350 mg/kg, oral, rat | | Not Available |
| 2855-13-2 | ISOPHORONEDIAMINE | 500 mg/kg oral | | Not Available |
| 80-05-7 | BISPHENOL A | 11400 mg/kg, oral, rat | | Not Available |
| 14808-60-7 | MICROCRYSTALLINE SILICA | Not Available | | Not Available |
| 68609-08-5 | AMINE ADDUCT | 500 mg/kg oral, rat | | Not Available |
| 103-83-3 | ALIPHATIC AMINE | Not Available | | Not Available |

Additional Information:

Causes burns. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

LC50 96hr (fish):

12.2 Persistence and degradability:

12.3 Bioaccumulative potential:

12.4 Mobility in soil:

12.5 Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

12.6 Other adverse effects:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|-------------------------|--------------------|------------------|------------------|
| 25068-38-6 | EPOXY RESIN | 2.1 mg/l (daphnia) | 11 mg/l (algae) | 1.3 mg/l (fish) |
| 68609-97-2 | ALKYL GLYCIDYL ETHER | 7.2 mg/L (Daphna) | 844 mg/l (Algae) | 1.8 g/L (Fish) |
| 12001-26-2 | MICA | No information | No information | No information |
| 100-51-6 | BENZYL ALCOHOL | No information | No information | No information |
| 111-40-0 | DIETHYLENETRIAMINE | No information | No information | No information |
| 13463-67-7 | TITANIUM DIOXIDE | No information | No information | No information |
| 67762-90-7 | HYDROPHOBIC SILICA | No information | No information | No information |
| 2855-13-2 | ISOPHORONEDIAMINE | No information | No information | No information |
| 80-05-7 | BISPHENOL A | No information | No information | No information |
| 14808-60-7 | MICROCRYSTALLINE SILICA | No information | No information | No information |
| 68609-08-5 | AMINE ADDUCT | No information | No information | No information |
| 103-83-3 | ALIPHATIC AMINE | No information | No information | No information |

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

| | | |
|------|--------------------------------------------------------------------------|-------------------------|
| 14.1 | UN number | UN 3066 |
| 14.2 | UN proper shipping name | Paint, Limited Quantity |
| | Technical name | N/A |
| 14.3 | Transport hazard class(es) | 8 |
| | Subsidiary shipping hazard | |
| 14.4 | Packing group | III |
| 14.5 | Environmental hazards | |
| 14.6 | Special precautions for user | |
| | EmS-No.: | |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | |

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| BISPHENOL A | 80-05-7 |

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|-------------------------------------------------|----------------|
| No TSCA 12(b) components exist in this product. | |

U.S. Clean Air Act:

EPA Coating Category:

EPA VOC Content Limit (g/l):

Product VOC Content (g/l)

Thinning Recommendations:

Application Recommendations:

Harmful if swallowed.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
|----------------------|----------------|

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|--------------------------|----------------|
| MODIFIED ALIPHATIC AMINE | 68610-56-0 |

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|-------------------------|----------------|
| TITANIUM DIOXIDE | 13463-67-7 |
| MICROCRYSTALLINE SILICA | 14808-60-7 |
| CARBON BLACK | 1333-86-4 |
| ETHYL BENZENE | 100-41-4 |
| CUMENE | 98-82-8 |
| EPICHLOROHYDRIN | 106-89-8 |
| BENZENE | 71-43-2 |

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| BISPHENOL A | 80-05-7 |
| EPICHLOROHYDRIN | 106-89-8 |
| TOLUENE | 108-88-3 |
| BENZENE | 71-43-2 |

International Regulations: As follows -*** Canadian DSL:**

No Information

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

| | |
|------|------------------------------------------|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

| | |
|------|------------------------------------------------------|
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H370 | Causes damage to organs. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Reasons for revision

No Information

No Information