



Safety Data Sheet
prepared to UN GHS Revision 3

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

- 1.1 Product Identifier** 121PA1NL
- Product Name:** PLASITE 4301 HT PART A **Revision Date:** 11/29/2017
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use. **Supersedes Date:** 05/30/2015
- 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

Acute Toxicity, Inhalation, category 4
 Eye Irritation, category 2
 Flammable Liquid, category 3
 STOT, repeated exposure, category 1
 STOT, single exposure, category 3, RTI
 Skin Irritation, category 2

2.2 Label elements

Symbol(s) of Product



Signal Word

danger

Named Chemicals on Label

METHACRYLIC ACID, STYRENE, MICA

HAZARD STATEMENTS

| | | |
|--|------|---|
| Flammable Liquid, category 3 | H226 | Flammable liquid and vapour. |
| Skin Irritation, category 2 | H315 | Causes skin irritation. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled. |
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation. |
| STOT, repeated exposure, category 1 | H372 | Causes damage to organs through prolonged or repeated exposure. |

PRECAUTION PHRASES

| | |
|--------------|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| 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. |
| P314 | Get medical advice/attention if you feel unwell. |
| P332+313 | If skin irritation occurs: Get medical advice/attention. |
| P403+233 | Store in a well-ventilated place. Keep container tightly closed. |

2.3 Other hazards

No Information

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> |
|----------------|----------------------|----------|
| 100-42-5 | STYRENE | 25-50 |
| 12001-26-2 | MICA | 2.5-10 |
| 13463-67-7 | TITANIUM DIOXIDE | 2.5-10 |
| 79-41-4 | METHACRYLIC ACID | 1.0-2.5 |

| <u>CAS-No.</u> | <u>GHS Symbols</u> | <u>GHS Hazard Statements</u> | <u>M-Factors</u> |
|----------------|--------------------|------------------------------|------------------|
| 100-42-5 | GHS02-GHS07-GHS08 | H226-304-315-319-332-335-372 | 0 |

| | | | |
|------------|-------------|--------------------------|---|
| 12001-26-2 | GHS07 | H319-335 | 0 |
| 13463-67-7 | | | 0 |
| 79-41-4 | GHS05-GHS06 | H227-302-311-314-331-335 | 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

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

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. Cool containers / tanks with water spray. Flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment.

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

Prevent further leakage or spillage if safe to do so. 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). 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: Inhibitor levels should be maintained. 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)

| <u>Name</u> | <u>%</u> | <u>ACGIH TLV-TWA</u> | <u>ACGIH TLV-STEL</u> | <u>OSHA PEL-TWA</u> | <u>OSHA PEL-CEILING</u> | <u>OEL Note</u> |
|------------------|----------|----------------------|-----------------------|---------------------|-------------------------|-----------------|
| STYRENE | 25-50 | 20 ppm | 40 ppm | 100 ppm | 200 ppm | |
| MICA | 2.5-10 | 3 MGM3 | N/E | 3 MGM3 | N/E | |
| TITANIUM DIOXIDE | 2.5-10 | 10 MGM3 | N/E | 10 MGM3 | N/E | |
| METHACRYLIC ACID | 1.0-2.5 | 20 PPM | N/E | 70 MGM3 | 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. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|--|-------------------------------|
| Appearance: | Viscous Grey Liquid |
| Physical State | Liquid |
| Odor | Styrene |
| Odor threshold | N/D |
| pH | N/D |
| Melting point / freezing point (°C) | N/D |
| Boiling point/range (°C) | 212 F (100 C) - 400 F (204 C) |
| Flash Point, (°C) | 31 |
| Evaporation rate | Slower Than Ether |
| Flammability (solid, gas) | Not determined |
| Upper/lower flammability or explosive limits | 0.9 - 14.0 |
| Vapour Pressure, mmHg | N/D |
| Vapour density | Heavier than Air |
| Relative density | Not determined |
| Solubility in / Miscibility with water | N/D |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Viscosity | Unknown |
| Explosive properties | Not determined |
| Oxidising properties | Not determined |

9.2 Other information

| | |
|---------------------------------------|------|
| VOC Content g/l: | 27 |
| Specific Gravity (g/cm ³) | 1.29 |

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 may occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition productsCarbon 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: Unknown**Corrosivity:** Unknown**Sensitization:** Unknown**Repeated dose toxicity:** Unknown**Carcinogenicity:** Unknown**Mutagenicity:** Unknown**Toxicity for reproduction:** Unknown

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> |
|----------------|----------------------|-------------------------|----------------------------|--------------------------|
| 100-42-5 | STYRENE | 2650 mg/kg, oral, rat | >2000 mg/kg, dermal, rat | 2800 ppm / 4hr, inh, rat |
| 12001-26-2 | MICA | Not Available | | Not Available |
| 13463-67-7 | TITANIUM DIOXIDE | 25000 mg/kg, oral (rat) | Not Available | Not Available |
| 79-41-4 | METHACRYLIC ACID | 1320 mg/kg, oral, rat | 1000 mg/kg, dermal, rabbit | 7.1 mg/L / 4h rat, inh |

Additional Information:

This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. The classification(s) is/are relevant when exposed to these respirable substances in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

12. Ecological Information**12.1 Toxicity:**

EC50 48hr (Daphnia): Unknown
IC50 72hr (Algae): Unknown
LC50 96hr (fish): Unknown

12.2 Persistence and degradability: Unknown**12.3 Bioaccumulative potential:** Unknown

- 12.4 Mobility in soil:** Unknown
- 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:** Unknown

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|----------------------|--------------------------|------------------------|------------------------------|
| 100-42-5 | STYRENE | 4.7 mg/l (daphnia) | 4.9 mg/l (Green Algae) | 4 - 10 mg/l (fathead minnow) |
| 12001-26-2 | MICA | No information | No information | No information |
| 13463-67-7 | TITANIUM DIOXIDE | No information | No information | No information |
| 79-41-4 | METHACRYLIC ACID | 130 mg/L (Daphnia Magna) | 20 mg/L (Green Algae) | 85 mg/L (Rainbow Trout) |

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. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

- 14.1 UN number** UN 1263
- 14.2 UN proper shipping name** Paint
- Technical name** N/A
- 14.3 Transport hazard class(es)** 3
- Subsidiary shipping hazard** N/A
- 14.4 Packing group** III
- 14.5 Environmental hazards** Unknown
- 14.6 Special precautions for user** Unknown
- EmS-No.:** F-E, S-E
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code** Unknown

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:

Fire Hazard, Reactive Hazard, 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> |
|----------------------|----------------|
| STYRENE | 100-42-5 |

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

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> |
|----------------------|----------------|
| DIMETHYLANILINE | 121-69-7 |

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> |
|----------------------|----------------|
| VINYL ESTER RESIN | TRADE SECRET |
| GLASS OXIDE | 65997-17-3 |

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> |
|----------------------|----------------|
| VINYL ESTER RESIN | TRADE SECRET |
| GLASS OXIDE | 65997-17-3 |
| FLY ASH | 68131-74-8 |

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> |
|-------------------------|----------------|
| STYRENE | 100-42-5 |
| TITANIUM DIOXIDE | 13463-67-7 |
| MICROCRYSTALLINE SILICA | 14808-60-7 |
| CARBON BLACK | 1333-86-4 |

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

No Proposition 65 Reproductive Toxins exist in this product.

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. |
| H227 | Combustible liquid |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

| | |
|------|---|
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.