



# SAFETY DATA SHEET

Issue Date 13-Jun-2017

Revision Date 13-Jun-2017

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** TL-222 HMW ESD Resin

### Other means of identification

**Product Code** 430B5  
**UN/ID no** UN1263  
**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Industrial Coatings  
**Uses advised against** No information available

### Details of the supplier of the safety data sheet

**Manufacturer Address**  
BLOME INTERNATIONAL  
1450 Hoff Industrial Drive  
O'Fallon, MO 63366

### Emergency telephone number

**Company Phone Number** 636-379-9119  
**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Acute toxicity - Oral                              | Category 4  |
| Acute toxicity - Inhalation (Dusts/Mists)          | Category 4  |
| Skin corrosion/irritation                          | Category 2  |
| Serious eye damage/eye irritation                  | Category 2A |
| Carcinogenicity                                    | Category 2  |
| Reproductive toxicity                              | Category 2  |
| Specific target organ toxicity (single exposure)   | Category 3  |
| Specific target organ toxicity (repeated exposure) | Category 1  |
| Flammable liquids                                  | Category 3  |

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Harmful if swallowed  
Harmful if inhaled  
Causes skin irritation  
Causes serious eye irritation

Suspected of causing cancer  
Suspected of damaging fertility or the unborn child  
May cause respiratory irritation. May cause drowsiness or dizziness  
Causes damage to organs through prolonged or repeated exposure  
Flammable liquid and vapor



**Appearance** viscous

**Physical state** liquid

**Odor** Strong Aromatic

#### **Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
In case of fire: Use CO2, dry chemical, or foam for extinction

#### **Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### **Hazards not otherwise classified (HNOC)**

Not applicable

#### **Other Information**

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

#### **Unknown acute toxicity**

63% of the mixture consists of ingredient(s) of unknown toxicity

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

| Chemical Name       | CAS No      | Weight-% |
|---------------------|-------------|----------|
| Vinyl Ester Resin * | Proprietary | 30 - 60  |
| Styrene *           | 100-42-5    | 15 - 40  |
| Graphite *          | 7782-42-5   | 10 - 30  |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

**Description of first aid measures**

|   |  |
|---|--|
| <b>General advice</b>                     | In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.  |
| <b>Eye contact</b>                        | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.                        |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.  |
| <b>Inhalation</b>                         | Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician. |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.  |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition. Use personal protective equipment as required.   |

**Most important symptoms and effects, both acute and delayed**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness. |
|-----------------|---|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Flammable. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Burning produces heavy smoke. Avoid runoff to waterways and sewers.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures****Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental precautions****Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up****Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

| Chemical Name         | ACGIH TLV  | OSHA PEL   | NIOSH IDLH   |
|-----------------------|--|--|--|
| Styrene<br>100-42-5   | STEL: 40 ppm<br>TWA: 20 ppm  | TWA: 100 ppm<br>Ceiling: 200 ppm   | IDLH: 700 ppm<br>TWA: 50 ppm<br>TWA: 215 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 425 mg/m <sup>3</sup> |
| Graphite<br>7782-42-5 | TWA: 2 mg/m <sup>3</sup> respirable fraction<br>all forms except graphite fibers | TWA: 15 mg/m <sup>3</sup> total dust synthetic<br>TWA: 5 mg/m <sup>3</sup> respirable fraction<br>synthetic<br>TWA: 15 mppcf natural | IDLH: 1250 mg/m <sup>3</sup><br>TWA: 2.5 mg/m <sup>3</sup> natural respirable<br>dust                      |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Appropriate engineering controls****Engineering Controls**

Showers  
Eyewash stations

Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face protection</b>      | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b> | Wear protective gloves and protective clothing.   |
| <b>Respiratory protection</b>   | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

|                       |         |                       |                 |
|-----------------------|---------|-----------------------|-----------------|
| <b>Physical state</b> | liquid  | <b>Odor</b>           | Strong Aromatic |
| <b>Appearance</b>     | viscous | <b>Odor threshold</b> | <1 ppm          |
| <b>Color</b>          | black   |                       |                 |

| <b><u>Property</u></b>                | <b><u>Values</u></b>      | <b><u>Remarks • Method</u></b>   |
|---------------------------------------|---------------------------|----------------------------------|
| <b>pH</b>                             | No information available  |                                  |
| <b>Melting point / freezing point</b> | No information available  |                                  |
| <b>Boiling point / boiling range</b>  | 115 °C / 239 °F           |                                  |
| <b>Flash point</b>                    | 27 °C / 80 °F             | Pensky-Martens Closed Cup (PMCC) |
| <b>Evaporation rate</b>               | 1                         |                                  |
| <b>Flammability (solid, gas)</b>      | No information available  |                                  |
| <b>Flammability Limit in Air</b>      |                           |                                  |
| <b>Upper flammability limit:</b>      | 1.1%                      |                                  |
| <b>Lower flammability limit:</b>      | 6.6%                      |                                  |
| <b>Vapor pressure</b>                 | 0.57 kPa                  | @ 20 °C                          |
| <b>Vapor density</b>                  | >1                        |                                  |
| <b>Relative density</b>               | 1.3                       |                                  |
| <b>Water solubility</b>               | Insoluble in water        |                                  |
| <b>Solubility in other solvents</b>   | No information available  |                                  |
| <b>Partition coefficient</b>          | No information available  |                                  |
| <b>Autoignition temperature</b>       | No information available  |                                  |
| <b>Decomposition temperature</b>      | No information available  |                                  |
| <b>Kinematic viscosity</b>            | > 1000 mm <sup>2</sup> /s | @ 40 °C                          |
| <b>Dynamic viscosity</b>              | No information available  |                                  |
| <b>Explosive properties</b>           | Not an explosive          |                                  |
| <b>Oxidizing properties</b>           | Not applicable            |                                  |

### **Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## **10. STABILITY AND REACTIVITY**

### **Reactivity**

No data available

### **Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization** Hazardous polymerization may occur.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Irritating to respiratory system. May cause drowsiness or dizziness. Harmful by inhalation. |
| <b>Eye contact</b>  | Irritating to eyes.   |
| <b>Skin contact</b> | Irritating to skin.   |
| <b>Ingestion</b>    | Harmful if swallowed.   |

| Chemical Name       | Oral LD50            | Dermal LD50 | Inhalation LC50         |
|---------------------|----------------------|-------------|-------------------------|
| Styrene<br>100-42-5 | = 1000 mg/kg ( Rat ) | -           | = 11.7 mg/L ( Rat ) 4 h |

**Information on toxicological effects**

**Symptoms** Vapors may cause drowsiness and dizziness. Coughing and/ or wheezing. May cause skin irritation. May cause redness and tearing of the eyes.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** Based on available data, the classification criteria are not met.  
**Germ cell mutagenicity** Based on available data, the classification criteria are not met.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name       | ACGIH | IARC     | NTP                    | OSHA |
|---------------------|-------|----------|------------------------|------|
| Styrene<br>100-42-5 | -     | Group 2B | Reasonably Anticipated | X    |

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*NTP (National Toxicology Program)*

*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Reproductive toxicity** Product is or contains a chemical which is a known or suspected reproductive hazard.  
**STOT - single exposure** Respiratory system. Central nervous system.  
**STOT - repeated exposure** Based on available data, the classification criteria are not met.  
**Chronic toxicity** Avoid repeated exposure. May cause adverse liver effects. Contains a known or suspected reproductive toxin.  
**Target Organ Effects** Central nervous system, Eyes, liver, lungs, Reproductive System, Respiratory system, Skin, Central Vascular System (CVS).  
**Aspiration hazard** Based on available data, the classification criteria are not met.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 1,139.00 mg/kg

**ATEmix (inhalation-dust/mist)** 1.95 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life with long lasting effects

73 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name       | Algae/aquatic plants   | Fish  | Crustacea                               |
|---------------------|--|---|---|
| Styrene<br>100-42-5 | 1.4: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.72: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.46 - 4.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.15 - 3.2: 96 h Pseudokirchneriella subcapitata mg/L EC50 static | 19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50 static 3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through | 3.3 - 7.4: 48 h Daphnia magna mg/L EC50 |

### Persistence and degradability

No information available.

### Bioaccumulation

| Chemical Name       | Partition coefficient |
|---------------------|-----------------------|
| Styrene<br>100-42-5 | 2.95                  |

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name       | California Hazardous Waste Status |
|---------------------|-----------------------------------|
| Styrene<br>100-42-5 | Toxic<br>Ignitable                |

## 14. TRANSPORT INFORMATION

### DOT

UN/ID no UN1263  
 Proper shipping name Paint  
 Hazard Class 3  
 Packing Group III  
 Special Provisions B1, B52, IB3, T2, TP1, TP29  
 Description UN1263, Paint, 3, III  
 Emergency Response Guide Number 128

### TDG

UN/ID no UN1263

**Proper shipping name** Paint  
**Hazard Class** 3  
**Packing Group** III  
**Description** UN1263, Paint, 3, III

**IATA**

**UN/ID no** UN1263  
**Proper shipping name** Paint  
**Hazard Class** 3  
**Packing Group** III  
**ERG Code** 3L  
**Special Provisions** A3, A72, A192  
**Description** UN1263, Paint, 3, III

**IMDG**

**UN/ID no** UN1263  
**Proper shipping name** Paint  
**Hazard Class** 3  
**Packing Group** III  
**EmS-No** F-E, S-E  
**Special Provisions** 163, 223, 955  
**Description** UN1263, Paint, 3, III (27°C c.c.)

|                                   |
|-----------------------------------|
| <b>15. REGULATORY INFORMATION</b> |
|-----------------------------------|

**International Inventories**

|                      |          |
|----------------------|----------|
| <b>TSCA</b>          | Complies |
| <b>DSL/NDSL</b>      | Complies |
| <b>EINECS/ELINCS</b> | Complies |
| <b>IECSC</b>         | Complies |
| <b>KECL</b>          | Complies |
| <b>PICCS</b>         | Complies |
| <b>AICS</b>          | Complies |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name      | SARA 313 - Threshold Values % |
|--------------------|-------------------------------|
| Styrene - 100-42-5 | 0.1                           |

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire hazard</b>                       | Yes |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)



| Chemical Name       | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Styrene<br>100-42-5 | 1000 lb                     | -                      | -                         | X                          |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name       | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                  |
|---------------------|--------------------------|----------------|---|
| Styrene<br>100-42-5 | 1000 lb                  | -              | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name         | New Jersey | Massachusetts | Pennsylvania |
|-----------------------|------------|---------------|--------------|
| Styrene<br>100-42-5   | X          | X             | X            |
| Graphite<br>7782-42-5 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|                                   |                                  |                |                    |                                    |
|-----------------------------------|----------------------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b>                       | Health hazards 2                 | Flammability 3 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b>                       | Health hazards 2*                | Flammability 3 | Physical hazards 0 | Personal protection X              |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> |                |                    |                                    |

**Issue Date** 13-Jun-2017

**Revision Date** 13-Jun-2017

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**