

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name : VLP  
 Product code : 60109

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**1.3. Details of the supplier of the safety data sheet**

Plasti Dip International, Inc.  
 3920 Pheasant Ridge Drive  
 Blaine, MN 55449  
 Phone - (763) 785-2156  
 Website: plastidip.com

**1.4. Emergency telephone number**

Emergency number : CHEMTREC: 1-800-424-9300 (US); 703-527-3887 (International)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**GHS-US classification**

Flam. Liq. 2 H225  
 Eye Irrit. 2A H319  
 Carc. 2 H351  
 STOT SE 3 H335

**2.2. Label elements**

**GHS-US labelling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

**Danger**

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapour  
 H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H351 - Suspected of causing cancer

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P210 - Keep away from heat, open flames, sparks. - No smoking  
 P233 - Keep container tightly closed  
 P240 - Ground/bond container and receiving equipment  
 P241 - Use explosion-proof electrical, lighting, ventilating equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 P261 - Avoid breathing vapours, mist  
 P264 - Wash hands, forearms and face thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P280 - Wear eye protection, face protection, protective clothing, protective gloves  
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P308+P313 - If exposed or concerned: Get medical advice/attention  
 P312 - Call a doctor, a POISON CENTER if you feel unwell  
 P337+P313 - If eye irritation persists: Get medical advice/attention  
 P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), dry extinguishing powder, foam to extinguish  
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
 P403+P235 - Store in a well-ventilated place. Keep cool  
 P405 - Store locked up  
 P501 - Dispose of contents/container to licensed waste handling facility

**2.3. Other hazards**

No additional information available

**2.4. Unknown acute toxicity (GHS US)**

No data available

**SECTION 3: Composition/information on ingredients****3.1. Substance**

Not applicable

**3.2. Mixture**

| Name                | Product identifier | %       |
|---------------------|--------------------|---------|
| Tetrahydrofuran     | (CAS No) 109-99-9  | 30 - 60 |
| Methyl ethyl ketone | (CAS No) 78-93-3   | 10 - 30 |

**SECTION 4: First aid measures****4.1. Description of first aid measures**

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

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

- Symptoms/injuries : Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : May cause gastrointestinal irritation.
- Chronic symptoms : Suspected of causing cancer.

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

No additional information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam.

**5.2. Special hazards arising from the substance or mixture**

- Fire hazard : Highly flammable liquid and vapour.
- Explosion hazard : Heating may cause an explosion.
- Reactivity : No dangerous reactions known under normal conditions of use.

**5.3. Advice for firefighters**

- Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

**6.1.1. For non-emergency personnel**

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

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### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Sweep or shovel spills into appropriate container for disposal.

Methods for cleaning up : Eliminate ignition sources. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Wash spill area thoroughly with plenty of soap and water. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

### 6.4. Reference to other sections

See Sections 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep the container tightly closed.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| <b>Tetrahydrofuran (109-99-9)</b>    |     |
|--------------------------------------|-----|
| ACGIH TWA (ppm)                      | 50  |
| ACGIH STEL (ppm)                     | 100 |
| OSHA PEL (TWA) (mg/m <sup>3</sup> )  | 590 |
| OSHA PEL (TWA) (ppm)                 | 200 |
| OSHA PEL (STEL) (mg/m <sup>3</sup> ) | 735 |
| OSHA PEL (STEL) (ppm)                | 250 |
| <b>Methyl ethyl ketone (78-93-3)</b> |     |
| ACGIH TWA (ppm)                      | 200 |
| ACGIH STEL (ppm)                     | 300 |
| OSHA PEL (TWA) (mg/m <sup>3</sup> )  | 590 |
| OSHA PEL (TWA) (ppm)                 | 200 |
| OSHA PEL (STEL) (mg/m <sup>3</sup> ) | 885 |
| OSHA PEL (STEL) (ppm)                | 300 |

### 8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Protective goggles. Protective clothing.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. . Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
 Color : Clear.  
 Odor : strong. Solvent.  
 Odor Threshold : No data available  
 pH : No data available  
 Relative evaporation rate (butylacetate=1) : > 1  
 Melting point : No data available  
 Freezing point : No data available  
 Boiling point : 66 - 79 °C (151 - 175 °F)  
 Flash point : -14 °C (6 °F) (TCC)  
 Auto-ignition temperature : No data available  
 Decomposition temperature : No data available  
 Flammability (solid, gas) : No data available  
 Vapour pressure : 143 mm Hg (20 °C)  
 Relative vapour density at 20 °C : Heavier than air  
 Relative density : 0.91 - 0.93 (H<sub>2</sub>O = 1)  
 Solubility : Water: Insoluble  
 Log Pow : No data available  
 Log Kow : No data available  
 Viscosity, kinematic : No data available  
 Viscosity, dynamic : No data available  
 Explosive properties : No data available  
 Oxidising properties : No data available  
 Explosive limits : 1.3 - 11.8 vol %

#### 9.2. Other information

VOC content : 80 - 81 % (6.2 LBS./GAL)

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

#### 10.3. Possibility of hazardous reactions

None known.

#### 10.4. Conditions to avoid

Avoid contact with : Ignition sources. Incompatible materials.

#### 10.5. Incompatible materials

Strong acids. Bases. Oxidizing agent. selected amines with alkali metals and halogens.

#### 10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### Tetrahydrofuran (109-99-9)

|                            |              |
|----------------------------|--------------|
| LC50 inhalation rat (mg/l) | 5309 mg/l/4h |
|----------------------------|--------------|

Skin corrosion/irritation : Not classified  
 Serious eye damage/irritation : Causes serious eye irritation.  
 Respiratory or skin sensitisation : Not classified  
 Germ cell mutagenicity : Not classified

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|  |  |
|--|--|
| Carcinogenicity                                    | : Suspected of causing cancer.           |
| Reproductive toxicity                              | : Not classified                         |
| Specific target organ toxicity (single exposure)   | : May cause respiratory irritation.      |
| Specific target organ toxicity (repeated exposure) | : Not classified                         |
| Aspiration hazard                                  | : Not classified                         |
| Symptoms/injuries after inhalation                 | : May cause respiratory irritation.      |
| Symptoms/injuries after skin contact               | : May cause skin irritation.             |
| Symptoms/injuries after eye contact                | : Causes serious eye irritation.         |
| Symptoms/injuries after ingestion                  | : May cause gastrointestinal irritation. |
| Chronic symptoms                                   | : Suspected of causing cancer.           |

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : No information available.

#### 12.2. Persistence and degradability

|                               |                           |
|-------------------------------|---------------------------|
| <b>VLP (F631)</b>             |                           |
| Persistence and degradability | No information available. |

#### 12.3. Bioaccumulative potential

|                           |                           |
|---------------------------|---------------------------|
| <b>VLP (F631)</b>         |                           |
| Bioaccumulative potential | No information available. |

#### 12.4. Mobility in soil

|                   |                           |
|-------------------|---------------------------|
| <b>VLP (F631)</b> |                           |
| Ecology - soil    | No information available. |

#### 12.5. Other adverse effects

Other adverse effects : No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

### SECTION 14: Transport information

In accordance with DOT

|   |   |
|---|---|
| Transport document description                    | : UN1139 Coating solution (Contains: Tetrahydrofuran), 3, II    |
| UN-No.(DOT)                                       | : 1139  |
| DOT NA no.  | : UN1139  |
| Proper Shipping Name (DOT)                        | : Coating solution<br>Contains: Tetrahydrofuran                 |
| Department of Transportation (DOT) Hazard Classes | : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 |
| Hazard labels (DOT)                               | : 3 - Flammable liquid  |



|  |   |
|--|---|
| Packing group (DOT)  | : II - Medium Danger  |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 5 L   |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)     | : 60 L  |
| DOT Vessel Stowage Location                                      | : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded. |

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### Additional information

Other information : No supplementary information available.

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

|   |   |
|---|---|
| <b>VLP (F631)</b>   |   |
| All components of this product are listed on the TSCA Inventory or are exempt |   |
| SARA Section 311/312 Hazard Classes   | Delayed (chronic) health hazard<br>Immediate (acute) health hazard<br>Fire hazard |

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| <b>Tetrahydrofuran (109-99-9)</b> |                                   |
| Section 302 (EHS) TPQ             |                                   |
| Section 304 EHS RQ                |                                   |
| CERCLA RQ                         | 1000 lb                           |
| Section 313                       | Not Listed on US SARA Section 313 |

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| <b>Methyl ethyl ketone (78-93-3)</b> |                                   |
| Section 302 (EHS) TPQ                |                                   |
| Section 304 EHS RQ                   |                                   |
| CERCLA RQ                            | 1000 lb                           |
| Section 313                          | Not Listed on US SARA Section 313 |

|                                 |                                   |
|---------------------------------|-----------------------------------|
| <b>cyclohexanone (108-94-1)</b> |                                   |
| Section 302 (EHS) TPQ           |                                   |
| Section 304 EHS RQ              |                                   |
| CERCLA RQ                       | 1000 lb                           |
| Section 313                     | Not Listed on US SARA Section 313 |

### 15.2. International regulations

No additional information available.

### 15.3. US State regulations

#### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

|  |  |
|--|--|
| <b>Tetrahydrofuran (109-99-9)</b>  |  |
| U.S. - Massachusetts - Right To Know List<br>U.S. - New Jersey - Right to Know Hazardous Substance List<br>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |  |

|   |  |
|---|--|
| <b>Methyl ethyl ketone (78-93-3)</b>  |  |
| U.S. - Massachusetts - Right To Know List<br>U.S. - New Jersey - Right to Know Hazardous Substance List<br>U.S. - Pennsylvania - RTK (Right to Know) List |  |

|  |  |
|--|--|
| <b>cyclohexanone (108-94-1)</b>  |  |
| U.S. - New Jersey - Right to Know Hazardous Substance List<br>U.S. - Massachusetts - Right To Know List<br>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |  |

|  |  |
|--|--|
| <b>Polyvinyl chloride (9002-86-2)</b>                      |  |
| U.S. - New Jersey - Right to Know Hazardous Substance List |  |

## SECTION 16: Other information

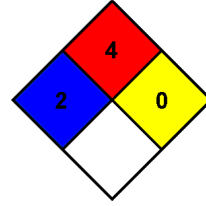
Indication of changes : Revision 1.0: New SDS Created.  
Revision date : 5/28/2015  
Other information : Author: BCS.

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- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health : 2\*
- Flammability : 4
- Physical : 0
- Personal Protection :

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product