1. Identification

Product identifier: GPX Grizzly & 2018-P Auto Mark (All Colors)
Other means of identification: None.
Recommended use: Marking.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information
- Company name: Diagraph MSP
- Address: 5307 Meadowland Parkway Marion IL 62959
- Telephone: 1-800-521-3047
- E-mail: msds@diagraphmsp.com
- Contact person: Customer Service
- Emergency phone number: Emergency telephone 800-535-5053 (US only) +1-352-323-3500 international

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 2
Health hazards:
- Serious eye damage/eye irritation Category 2A
- Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
- Specific target organ toxicity, single exposure Category 3 narcotic effects

OSHA defined hazards: Not classified.

Label elements
- Signal word: Danger
- Hazard statement: Highly flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statement
- Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area.
- Response: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. In case of fire: Use appropriate media to extinguish.
- Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Co Solvent B</td>
<td>Trade Secret</td>
<td>15-30</td>
</tr>
<tr>
<td>Ethyl lactate</td>
<td>97-64-3</td>
<td>10-15</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>10-15</td>
</tr>
<tr>
<td>Terpenes and Terpenoids, turpentine-oil, .alpha.-pinene fraction, polymers with phenol</td>
<td>259094-71-8</td>
<td>10-15</td>
</tr>
<tr>
<td>1-Methoxy-2-propanol</td>
<td>107-98-2</td>
<td>1-5</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>0-30</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>0-10</td>
</tr>
<tr>
<td>Kaolin, calcined</td>
<td>92704-41-1</td>
<td>0-5</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and take along these instructions.

Skin contact: Take off contaminated clothing and wash before reuse. Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Eye contact: Rinse with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. Coughing. Vapors may cause drowsiness and dizziness. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

5. Fire-fighting measures

Suitable extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: The product is highly flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Special protective equipment and precautions for firefighters: Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. For personal protection, see section 8 of the SDS.
Extinguish all flames in the vicinity. Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. Clean up in accordance with all applicable regulations. For waste disposal, see Section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

7. Handling and storage

Precautions for safe handling
Do not smoke and do not spray near an open flame or other sources of ignition. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. The product is highly flammable, and explosive vapor/air mixtures may be formed. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid sparks and prevent accumulation of electrostatic charges. Provide adequate ventilation. Local exhaust is recommended. Observe good industrial hygiene practices.

Precautions for safe storage, including any incompatibilities
Follow rules for flammable liquids. Do not store near heat sources or expose to high temperatures. Keep away from heat, sparks and open flame. Store in a closed container away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>PEL</td>
<td>3.5 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td>PEL</td>
<td>1900 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Proprietary Co Solvent B (CAS Trade Secret)</td>
<td>PEL</td>
<td>710 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol (CAS 107-98-2)</td>
<td>STEL</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td>TWA</td>
<td>3.5 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Proprietary Co Solvent B (CAS Trade Secret)</td>
<td>STEL</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>150 ppm</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol (CAS 107-98-2)</td>
<td>STEL</td>
<td>540 mg/m3</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>360 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5 mg/m3</td>
</tr>
</tbody>
</table>

Grizzly & 2018-P Auto Mark
916164 Version #: 03.1 Revision date: 06-December-2016 Issue date: 30-October-2013 SDS US
### US - California OELs: Skin designation
1-Methoxy-2-propanol (CAS 107-98-2) Can be absorbed through the skin.

### Appropriate engineering controls
Observe Occupational Exposure Limits and minimize the risk of inhalation. Explosion-proof general and local exhaust ventilation. Provide easy access to water supply and eye wash facilities.

### Individual protection measures, such as personal protective equipment
#### Eye/face protection
Wear approved safety goggles.

#### Skin protection
- **Hand protection**
  For prolonged or repeated skin contact use suitable protective gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.
- **Other**
  Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with combination filter. Seek advice from local supervisor.

#### Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

#### Appearance
- **Physical state**  
  Liquid.
- **Form**  
  Liquid.
- **Color**  
  Various.
- **Odor**  
  Not available.
- **Odor threshold**  
  Not available.
- **pH**  
  Not available.
- **Melting point/freezing point**  
  Not available.
- **Initial boiling point and boiling range**  
  Not available.
- **Flash point**  
  62.0 °F (16.7 °C) (Solvent Blend)
- **Evaporation rate**  
  Not available.
- **Flammability (solid, gas)**  
  Not available.

#### Upper/lower flammability or explosive limits
- **Flammability limit - lower (%)**  
  Not available.
- **Flammability limit - upper (%)**  
  Not available.
- **Explosive limit - lower (%)**  
  Not available.
10. Stability and reactivity

Reactivity
Stable at normal conditions.

Chemical stability
The product is stable and non reactive under normal conditions of use, storage and transport.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Conditions to avoid
Contact with incompatible materials. Keep away from heat, sparks and open flame.

Incompatible materials

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause respiratory tract irritation.

Skin contact
Causes mild skin irritation. Repeated exposure may cause skin dryness or cracking.

Eye contact
Causes serious eye irritation.

Ingestion
May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
Symptoms may include redness, drying and cracking of the skin. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Vapors may cause drowsiness and dizziness. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity
May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-2-propanol (CAS 107-98-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>3739 mg/kg</td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>39 g/m3, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>7000 - 11000 mg/kg</td>
</tr>
<tr>
<td>Proprietary Co Solvent B (CAS Trade Secret)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>2000 ppm, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>10768 mg/kg</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation
Causes mild skin irritation. Prolonged or repeated contact may dry skin and cause dermatitis.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Respiratory sensitization
No data available.

Skin sensitization
Not a skin sensitizer.

Germ cell mutagenicity
No data available.

Carcinogenicity
Inhalation of carbon black or titanium dioxide dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.

IARC Monographs. Overall Evaluation of Carcinogenicity
Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

NTP Report on Carcinogens
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
No data available.

Specific target organ toxicity - single exposure
May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure
No data available.

Aspiration hazard
No data available.

Chronic effects
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. The product contains organic solvents which may be absorbed into the body by skin contact and cause permanent damage to the nervous system, including the brain.

12. Ecological information

Ecotoxicity
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>Ceriodaphnia dubia 5012 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>NOEC</td>
<td>Ceriodaphnia dubia 9.6 mg/l</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Pimephales promelas 13480 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data available.

Bioaccumulative potential
Partition coefficient n-octanol / water (log Kow)
Ethyl alcohol (CAS 64-17-5) -0.31
Proprietary Co Solvent B 1.78

Mobility in soil
No data available.

Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal considerations

Disposal instructions
Dispose in accordance with all applicable regulations.

Hazardous waste code
D001: Waste Flammable material with a flash point <140 °F

Waste from residues / unused products
Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging
Since emptied containers retain product residue, follow label warnings even after container is emptied.
14. Transport information

**DOT**

- **UN number**: UN1210
- **UN proper shipping name**: Printing ink, flammable
- **Transport hazard class(es)**:
  - **Class**: 3
  - **Subsidiary risk**: -
  - **Label(s)**: 3
- **Packing group**: II
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.
- **Special provisions**: 149, IB2, T4, TP1, TP8
- **Packaging exceptions**: 150
- **Packaging non bulk**: 173
- **Packaging bulk**: 242

**IATA**

- **UN number**: UN1210
- **UN proper shipping name**: Printing ink flammable
- **Transport hazard class(es)**:
  - **Class**: 3
  - **Subsidiary risk**: -
  - **Label(s)**: 3
- **Packing group**: II
- **Environmental hazards**: No.
- **ERG Code**: 3L
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

- **UN number**: UN1210
- **UN proper shipping name**: PRINTING INK flammable
- **Transport hazard class(es)**:
  - **Class**: 3
  - **Subsidiary risk**: -
  - **Label(s)**: 3
- **Packing group**: II
- **Environmental hazards**: No.
- **Marine pollutant**: F-E, S-D
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**: Not applicable.

15. Regulatory information

**US federal regulations**

- **This product is hazardous according to OSHA 29 CFR 1910.1200.**
  - **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**: Not regulated.
  - **CERCLA Hazardous Substance List (40 CFR 302.4)**:
    - 1-Methoxy-2-propanol (CAS 107-98-2) LISTED
    - Proprietary Co Solvent B (CAS Trade Secret) LISTED
  - **Superfund Amendments and Reauthorization Act of 1986 (SARA)**:
    - **Immediate Hazard - Yes**
    - **Delayed Hazard - No**
    - **Fire Hazard - Yes**
    - **Pressure Hazard - No**
    - **Reactivity Hazard - No**
  - **SARA 302 Extremely hazardous substance**: Not listed.
SARA 311/312 Hazardous chemical  Yes

SARA 313 (TRI reporting)  Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List  Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)  Not regulated.

Safe Drinking Water Act (SDWA)  Not regulated.

US state regulations  WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List
1-Methoxy-2-propanol (CAS 107-98-2)
Carbon black (CAS 1333-86-4)
Ethyl alcohol (CAS 64-17-5)
Ethyl lactate (CAS 97-64-3)
Proprietary Co Solvent B (CAS Trade Secret)
Titanium dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act
1-Methoxy-2-propanol (CAS 107-98-2)
Carbon black (CAS 1333-86-4)
Ethyl alcohol (CAS 64-17-5)
Ethyl lactate (CAS 97-64-3)
Proprietary Co Solvent B (CAS Trade Secret)
Titanium dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law
1-Methoxy-2-propanol (CAS 107-98-2)
Carbon black (CAS 1333-86-4)
Ethyl alcohol (CAS 64-17-5)
Ethyl lactate (CAS 97-64-3)
Proprietary Co Solvent B (CAS Trade Secret)
Titanium dioxide (CAS 13463-67-7)

US. Rhode Island RTK
Proprietary Co Solvent B (CAS Trade Secret)

US. California Proposition 65
Not Listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date  30-October-2013
Revision date  05-August-2015
Version #  02
HMIS® ratings
Health: 2
Flammability: 3
Physical hazard: 0
NFPA ratings

Disclaimer

Diagraph MSP cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.