Section 1: Product and Company Identification
Product Name: PELCO® Conductive Nickel Paint
Synonym: None
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Hazard Identification
2.1 Classification of the substance or mixture

GHS Pictograms

![GHS02] ![GHS08] ![GHS07]

GHS Categories
GHS02 Flammable
Flam. Liq. 2: H225
GHS08 Health Hazard
Carcinogenicity 2: H351
Rep. Tox. 2: H361
GHS07 Irritant
Spec. Target Organ Tox., Repeated exposure 1,2: H336
Eye irritation 2: H319
Sensitization 1: H317
Skin irritation 3: H315

Environmental hazard: Chronic Aquatic Toxicity 3: H412

2.2 Label elements

Signal word: DANGER
Hazard statements
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness and dizziness.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damages to organs (lungs, central nervous system, inner ear) through prolonged or repeated exposure by inhalation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P201 Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking.
P202 Do not handle until all safety precautions have been read and understood.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P243 Take action to prevent static discharges.
P260 Do not breathe mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection.
P303+P361+P364+P352 IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water.
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 POISON CENTER/doctor if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P403+P235 Store in a well ventilated place. Keep cool.
P405 Store locked up.
2.3 Other Hazards

Hazards not otherwise classified
Defats skin: Repeated exposure may cause skin dryness or cracking.

HMIS Hazard Rating: Health: 2; Flammability: 3 Physical Hazard: 0
NFPA Hazard Rating: Health: 2; Fire: 3 Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Emergency overview
Appearance: Steel grey
Immediate effects: If inhaled: Dizziness, drowsiness, headaches, nausea, cough, blurred vision, fatigue. Eye contact: Irritation, redness, pain, blurred vision. Skin contact: Irritation, pain, redness. If swallowed: Nausea, vomiting, abdominal cramps, irritation, burning sensation, or dizziness.

Potential health effects
Primary Routes of entry: Eyes, ingestion, inhalation, and skin.
Signs and Symptoms of Overexposure: ND
Eyes: Liquid in contact with eyes may cause permanent eye damage.
Skin: May cause skin irritation and possible pain and stinging if the skin is abraded.
Ingestion: May cause respiratory and digestive tract irritation.
Inhalation: Solvents may cause respiratory tract irritation, headache, and possible dizziness.
Chronic Exposure: Prolonged and repeated exposure may cause dermatitis, defatting of the skin, liver and kidney damage, and adverse central nervous system effects.
Chemical Listed As Carcinogen Or Potential Carcinogen: Nickel
See Toxicological Information (Section11)

Potential environmental effects
See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m3</th>
<th>ACGIH TWA mg/m3</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel (7440-02-0) 30-60</td>
<td>1.0</td>
<td>1.5</td>
<td>Yes</td>
<td>2B</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Toluene (108-88-3) 7-13</td>
<td>200ppm</td>
<td>20ppm</td>
<td>No</td>
<td>Group 3</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Acetone (67-64-1) 5-10</td>
<td>1000ppm</td>
<td>500ppm</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Isobutyl acetate (110-19-0) 1-5</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Heptan-2-one (110-43-0) 1-5</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Ethanol (64-17-5) 1-5</td>
<td>1000ppm</td>
<td>1000ppm</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Talc (14807-96-6) 1-5</td>
<td>20mppcf</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Ethyl acetate (141-78-6)</td>
<td>1-5</td>
<td>NE</td>
<td>400ppm</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----</td>
<td>----</td>
<td>--------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>1-Methoxy-2-propanol acetate (108-65-6)</td>
<td>0.5-1.5</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

mppcf: Millions of particles per cubic foot of air for talc not containing asbestos

**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

**Exposure Condition, GHS Code: Precautionary Statement**

**Eye(s) Contact:**
Symptoms: Immediate: irritation, redness.
Response: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Skin Contact:**
Symptoms: Immediate: irritation, pain, redness; Delayed: dry skin, rash.
Response: Take off contaminated clothing and wash it before reuse. Wash with plenty of water. If skin irritation or rash persists, get medical attention.

**Inhalation:**
Symptoms: Immediate: dizziness, drowsiness, headaches, nausea, cough, blurred vision, fatigue.
Response: Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. If feeling unwell, call a POISON CENTER/doctor. If exposed or concerned: Get medical advice.

**Ingestion:**
Symptoms: Immediate: nausea, sore throat, diarrhea, drowsiness, or dizziness.
Response: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If exposed or concerned: Get medical advice.

**Note to physician**
Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

**Section 5: Fire Fighting Measures**

Flash Point: -17°C. Lower bound FP estimate is based on the closed cup value for the acetone component.
Flammable Limits: LFL 1% UFL 12% (in volume %)
Auto-ignition point: ≥315°C. Values based on 1-methoxy-2-propanol acetate, which is the component with the lowest auto-ignition value.
Fire Extinguishing Media: Use dry chemical, carbon dioxide, or chemical foam to extinguish
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full fire-fighting turn-out gear for fire-fighting
Unusual Fire and Explosion Hazards: Will burn if involved in a fire. The liquid may float on water and ignite. Vapors are heavier than air, and may travel to sources of ignition near the ground. Vapors may travel long distances and ignite at an ignition source, which can cause a
flashback or an explosion. Produces irritating and toxic fumes in fires or in contact with hot surfaces. May produce very toxic nickel carbonyl gas in the presence of carbon monoxide in a reducing atmosphere.

Hazardous combustion products: Produces CO, CO2, nitrous oxides, nickel oxides, and smoke. May produce a very toxic nickel carbonyl gas in presence of CO.

DOT Class: Flammable

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**Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection.

Precautions for response: Do not breathe the mist/spray/vapors. Remove or keep away all sources of extreme heat or open flames.

Cleaning: Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound (such as soil, sand, vermiculite) onto spill, then sweep into the container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water to remove the last traces of residue.

Environmental precautions: Avoid releasing to the environment. Prevent spill from entering drains and waterways.

Recommendation: A metal container is suggested. Dispose of spill waste according to Section 13

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

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**Section 7: Handling and Storage**

Precautions to be taken in Handling and Storage.

Prevention: Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe mist/vapors/spray. Do not eat, drink, or smoke when using this product. Store in well-ventilated place. Store locked up.

Handling: Wear protective gloves/protective clothing/eye protection. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Avoid release to the environment.

Storage temperature: Keep cool.

Storage Pressure: NA

---

**Section 8: Exposure Controls / Personal Protection**
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Country/provinces</th>
<th>Long term exposure limits (PEL)</th>
<th>Short term exposure limits (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>ACGIH</td>
<td>1.5 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>1 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>1.5 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>0.05 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>1 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>1 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td>Toluene</td>
<td>ACGIH</td>
<td>20 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>200 ppm</td>
<td>300 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>50 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>20 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>20 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>100 ppm</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Acetone</td>
<td>ACGIH</td>
<td>500 ppm</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>500 ppm</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>250 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>500 ppm</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>750 ppm</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Isobutyl acetate</td>
<td>ACGIH</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td>Heptan-2-one</td>
<td>ACGIH</td>
<td>50 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>100 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>50 ppm</td>
<td>Not established</td>
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<tr>
<td></td>
<td>Canada BC</td>
<td>50 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>25 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>50 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethanol</td>
<td>ACGIH</td>
<td>Not established</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>Not established</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>Not established</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td>Talc (non-asbestos fiber)</td>
<td>ACGIH</td>
<td>2 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>20 mppcf a)</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>2 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada BC</td>
<td>2 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>2 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>3 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>ACGIH</td>
<td>400 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA PEL</td>
<td>400 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>400 ppm</td>
<td>Not established</td>
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<tr>
<td></td>
<td>Canada BC</td>
<td>150 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>400 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>400 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td>1-methoxy-2-propanol acetate</td>
<td>ACGIH</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>USA OSHA WEEL</td>
<td>50 ppm</td>
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</tr>
<tr>
<td></td>
<td>Canada AB</td>
<td>Not established</td>
<td>Not established</td>
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<td></td>
<td>Canada BC</td>
<td>50 ppm</td>
<td>75 ppm</td>
</tr>
<tr>
<td></td>
<td>Canada ON</td>
<td>50 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Canada QC</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>
Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers’ SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.
a) Million particles per cubic foot of air, based on impinge samples counted by light-field technique.

Engineering Controls
Ventilation required: Keep airborne concentrations below exposure limits given in Section 3.
Recommendation: Respect the time weighted average of 20 ppm for toluene.

Personal Protection Equipment
Respiratory protection: For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges. Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus. RECOMMENDATION: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this SDS, and that the respirator is fitted to the employee by a professional. Recommendation: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.
Protective gloves: For likely contacts, use of protective butyl rubber, fluorinated rubber, or other chemically-resistant gloves. For incidental contacts, use nitrile, neoprene, PVC gloves, or other chemically-resistant gloves.
Skin protection: Wear appropriate protective clothing to prevent skin contact.
Eye protection: Wear appropriate protective eyeglasses or chemical safety goggles.
Recommendation: Use safety glasses with lateral protection (side shields).
General hygiene considerations: Wash hands thoroughly with water and soap after handling.
Additional clothing and/or equipment: ND

Exposure Guidelines
See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties
Appearance and Physical State: Steel grey liquid.
Odor (threshold): Benzene like, sweetish (2 ppm)
Specific Gravity (H₂O=1): 1.67 @25°C
Vapor Pressure (mm Hg): 100 hPa [75 mmHg]
Vapor Density (air=1): >2
Percent Volatile by volume: ND
VOC (Volatile Organic Content) = 27% [466 g/L]
Evaporation Rate (butyl acetate=1): Fast
Boiling Point: ≥56 °C
Freezing point / melting point: NE
Partition Coefficient: NE
Viscosity: ≥34 mm²/s @40°C
pH: NE
Solubility in Water: Partial
Molecular Weight: NA

Section 10: Stability and Reactivity
Stability: Stable at normal temperatures and pressures.
Conditions to Avoid: Ignition sources, open flames, excessive heat, and incompatible substances.
Materials to Avoid (Incompatibility): Strong oxidizing agents, strong acids, strong bases, ammonium nitrate, perchlorates, phosphorus, selenium, and sulfur.
Reactivity: The nickel can react vigorously with acids and liberate hydrogen, which can form an explosive mixture in air. Nickel may react with carbon monoxide in a reducing atmosphere to form a very toxic nickel carbonyl gas.
Hazardous Decomposition Products: Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information
Routes of exposure: eyes, ingestion, inhalation, and skin.

Symptoms summary
- **Eyes**: Cause eye redness and severe irritation.
- **Skin**: May cause skin redness and mild irritation.
- **Inhalation**: May cause drowsiness, dizziness, cough, headaches, nausea, unconsciousness.
- **Ingestion**: May cause nausea, sore throat, and diarrhea (see inhalation symptoms).
- **Chronic**: Prolonged or repeated exposure may cause skin dryness, cracking, as well as defatting the skin. Chronic inhalation exposure to nickel dust or mist may affect the central nervous system, damage lungs, and lead to hearing loss with co-exposure to loud noises. Ingestion or inhalation of paint material, mist, or vapor during pregnancy may increase the chances of fetal death and developmental defects.

### Results of component toxicity test performed

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 oral</th>
<th>LD50 dermal</th>
<th>LC50 inhalation</th>
<th>TCLo inhalation a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td>5,000 mg/kg Rat</td>
<td>NE</td>
<td>NE</td>
<td>10 mg/m³ 2 h Mouse</td>
</tr>
<tr>
<td>Toluene</td>
<td>636 mg/kg Rat</td>
<td>12,124 mg/kg Rabbit</td>
<td>49 g/m³ 4h Rat</td>
<td>200 ppm Human</td>
</tr>
<tr>
<td>Acetone</td>
<td>5,800 mg/kg Rat, 5,340 mg/kg Rabbit</td>
<td>&gt;9 400 µL/kg Guinea pig</td>
<td>44 g/m³ 4 h Rat, 50.1 g/m³ 8 h Rat</td>
<td>10 mg/m³ 6 h Human, 30 g/m³ 2 h Rat</td>
</tr>
<tr>
<td>Isobutyl acetate</td>
<td>13,400 mg/kg Rat</td>
<td>&gt;17 400 mg/kg Rabbit</td>
<td>NE</td>
<td>8,000 ppm 4h Rat TCLo b)</td>
</tr>
<tr>
<td>2-heptanone</td>
<td>1,670 mg/kg Rat, 730 mg/kg Mouse</td>
<td>12,600 µL/kg Rabbit</td>
<td>NE</td>
<td>7,000 mg/m³ 4 h Guinea pig</td>
</tr>
<tr>
<td>Ethanol</td>
<td>7,060 mg/kg Rat, 3,450 mg/kg Mouse</td>
<td>NE</td>
<td>20,000 ppm 10 h Rat, 39 g/m³ 4 h Mouse</td>
<td>2,500 mg/m³ 20 min Human, 50,000 mg/m³ 2 h Mouse</td>
</tr>
<tr>
<td>Talc</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>17 mg/m³ 6 h 26 d Rat</td>
</tr>
<tr>
<td>Ethyl Acetate</td>
<td>5,620 mg/kg Rat, 4,100 mg/kg Mouse</td>
<td>&gt;20,000 µL/kg Rabbit</td>
<td>45 g/m³ 2 h Mouse</td>
<td>1,105 mg/m³ 4 h Rat</td>
</tr>
<tr>
<td>1-methoxy-2-propanol acetate</td>
<td>8,532 mg/kg Rat, &gt;5,000 mg/kg Mouse</td>
<td>&gt;5 g/kg Rabbit</td>
<td>NE</td>
<td>400 ppm Human</td>
</tr>
</tbody>
</table>

a) Lowest published lethal concentration
b) Lethal concentration low
**Human experience**

Skin corrosion/irritation: The toluene component is a known severe skin irritant. Prolonged or repeated skin contact may cause dermatitis.

Serious eye damage/irritation: Acetone, ethanol, and ethyl acetate cause serious eye irritations. Contains mechanically abrasive particles.

Sensitization (allergic reactions): Nickel may cause skin sensitization in humans.

Carcinogenicity (risk of cancer): Nickel is classified as a suspect carcinogen based on animal intratracheal instillation (intubation) or interperitoneal (in body cavity) injection studies. A reliable 2008 study by Oller et al. shows no carcinogenicity for the nickel metal via normal inhalation route. Evidence of carcinogenicity of ethanol relates to excessive alcoholic beverage consumption, and doesn’t relate to exposure risks when used in the workplace or as a non-comestible consumer product.

- **Elemental Nickel [7440-02-0]**
  - IARC Group 2B: Possibly carcinogenic to humans
  - ACGIH A5: Not suspected as human carcinogen
  - CA Prop 65: Listed as a carcinogen
  - NTP: Reasonably anticipated to be a human carcinogen

- **Ethanol [CAS# 64-17-5]**
  - IARC Group 1: Possibly carcinogenic to humans in the form of alcoholic beverages (not ethanol)
  - ACGIH A4: Not classified as a human carcinogen
  - CA Prop 65: Listed as a carcinogen when consumed as a beverage
  - NTP: When in alcoholic beverage consumption, it is listed as a known carcinogen

Mutagenicity (risk of heritable genetic effects): Not known

Reproductive Toxicity (risk to sex functions): Toluene, ethanol, and acetone present reproductive and developmental hazards at high doses (>13,000 µg/day).

Teratogenicity (risk of fetus malformation): Harmful to unborn fetus in large doses.

STOT-single exposure: Inhalation of toluene may affect the central nervous system.

STOT-repeated exposure: Nickel particles can damage the respiratory tract leading to inflammation, lung fibrosis, and accumulation of nickel particles in a rat study. Contains 12% toluene, which is a Cat 2 STOT repeated exposure hazard for the central nervous system and cochlear systems. Toluene is an ototoxic chemical according to rat studies: inhalation exposure in the presence of noise may lead to cochlear impairment.

Aspiration hazard: Viscosity at 40 °C is >20.5 mm²/s, thus not classified as aspiration hazard.

This product **does** contain compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

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**Section 12: Ecological Information**

Acute ecotoxicity: Harmful to aquatic life with long lasting effects.

Chronic Ecotoxicity: Harmful to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage.

Biodegradability: The nickel content is not biodegradable.

Note: Nickel can be recovered from the waste to reclaim the value of the nickel.

Chemical Fate Information: ND
Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: ND
Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information
Classified as Consumer Commodity. Ground USA: - 4L size and smaller
US DOT Information: Proper shipping name: Paint
Hazard Class: 3
Packaging group: II
UN Number: UN1263
IATA: Proper shipping name: Paint
Hazard Class: 3
Packaging group: II
UN Number: UN1263
Marine Pollutant: None listed
Canadian TDG:
Proper shipping name: Paint
Hazard class: 3
Packing group: II
UN Number: UN1263

Section 15: Regulatory Information
United States Federal Regulations
CAA (Clean Air Act, USA)
This product does not contain any class 1 ozone depleting substances.
This product does not contain any class 2 ozone depleting substances.
This product contains toluene (CAS# 108-88-3), which is listed as hazardous air pollutants.
SARA: (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)
SARA Title III: This product contains Toluene (CAS# 108-88-3, 13%) and Nickel (CAS #7440-02-0 (45%), toxic chemicals subject to the reporting requirements of section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372
RCRA: ND
EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45
This product contains toluene (CAS# 108-88-3) and nickel (CAS# 7440-02-0) subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.
TSCA: (Toxic Substances Control Act of 1976, USA) All substances are TSCA listed.
CERCLA: The following components are listed: Toluene (CAS# 108-88-3) RQ is 1000lbs, Acetone (67-64-1)RQ is 5000 lbs, Nickel (CAS #7440-02-0) RQ is 100 lbs, Ethyl acetate (141-78-6) RQ is 5000lbs.

State Regulations
California Proposition 65: Warning! This product is or contains chemical(s) known to the state of California to cause cancer or reproductive harm. This product contains Nickel,( metallic), which is listed as a carcinogen. This product contains toluene, which is listed as reproductively toxic.
International Regulations
Canada WHMIS: Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)
All hazardous ingredients are listed on the DSL/NDSL.
Europe EINECS Numbers: ND
Europe:
RoHS: This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB’s, or PBDE’s, and complies with European RoHS regulations.

Section 16: Other Information
Label Information:
Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

Disclaimer
Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

MSDS Form 0013F1 V2