SECTION 1. IDENTIFICATION

Product name: GSLA T LMM-6018 Marking Tape 2”x50ft roll 00000000001407097

Product code: RS_FP_303534

Manufacturer or supplier’s details
Company name of supplier: Ferro Corporation
Address: 6060 Parkland Blvd. Suite 250
Mayfield Heights OH 44124-4185
Telephone: (216) 875-5600

Disposal considerations: Dispose of wastes in an approved waste disposal facility.

Emergency telephone number
CHEMTREC In-Country: (800)424-9300
CHEMTREC Global Number: +(1)-703-527-3887(Call Collect)

Recommended use of the chemical and restrictions on use
Recommended use: Industrial use
Restrictions on use: Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Germ cell mutagenicity: Category 1B
Carcinogenicity: Category 1B
Aspiration hazard: Category 1

GHS Label element
Hazard pictograms: 

Signal word: Danger

Hazard statements: H304 May be fatal if swallowed and enters airways.
H340 May cause genetic defects.
H350 May cause cancer.

Precautionary statements: Prevention: P201 Obtain special instructions before use.
SAFETY DATA SHEET

P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : organic solvent, synthetic polymer, inorganic pigment, glass/frit

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret Iron cobalt chromite compound</td>
<td>Not Assigned</td>
<td>( \geq 50 - &lt; 70 )</td>
</tr>
<tr>
<td>glass, oxide, chemicals</td>
<td>65997-17-3</td>
<td>( \geq 10 - &lt; 20 )</td>
</tr>
<tr>
<td>solvent naphtha (petroleum), light, aromatic</td>
<td>64742-95-6</td>
<td>( \geq 5 - &lt; 10 )</td>
</tr>
<tr>
<td>solvent naphtha (petroleum), heavy, aromatic</td>
<td>64742-94-5</td>
<td>( \geq 1 - &lt; 5 )</td>
</tr>
<tr>
<td>solvent naphtha (petroleum), light aliph. (benzene content &lt; 0.1%)</td>
<td>64742-89-8</td>
<td>( \geq 1 - &lt; 5 )</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Consult a physician.
If inhaled : Remove to fresh air.
If unconscious place in recovery position and seek medical advice.
Never give anything by mouth to an unconscious person.
In case of skin contact : Wash off immediately with soap and plenty of water.
If a person feels unwell or symptoms of skin irritation appear, consult a physician.
In case of eye contact : Rinse immediately with plenty of water and seek medical advice.
If swallowed : Do NOT induce vomiting.
Rinse immediately with plenty of water and seek medical advice.
Most important symptoms and effects, both acute and delayed:
- May be fatal if swallowed and enters airways.
- May cause genetic defects.
- May cause cancer.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards during firefighting:
- Exposure to decomposition products may be a hazard to health.
- Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for firefighters:
- In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Ensure adequate ventilation.
- Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions:
- Do not flush into surface water or sanitary sewer system.
- Prevent product from entering drains.

Methods and materials for containment and cleaning up:
- Sweep up and shovel into suitable containers for disposal.
- Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Do not get in eyes or mouth or on skin.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Do not use in areas without adequate ventilation.

Conditions for safe storage:
- Keep in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible</th>
<th>Basis</th>
</tr>
</thead>
</table>


glass, oxide, chemicals | 65997-17-3 | TWA | 1 fibre/cm³ | ACGIH
solvent naphtha (petroleum), light, aromatic | 64742-95-6 | TWA | 500 ppm 2,000 mg/m³ | OSHA Z-1
| TWA | 400 ppm 1,600 mg/m³ | OSHA P0
| TWA | 200 mg/m³ (as total hydrocarbon vapor) | ACGIH
solvent naphtha (petroleum), heavy, aromatic | 64742-94-5 | TWA | 500 ppm 2,000 mg/m³ | OSHA Z-1
| TWA | 200 mg/m³ (as total hydrocarbon vapor) | ACGIH
| TWA | 400 ppm 1,600 mg/m³ | OSHA P0
solvent naphtha (petroleum), light aliph.(benzene content < 0.1%) | 64742-89-8 | TWA | 500 ppm 2,000 mg/m³ | OSHA Z-1
| TWA | 400 ppm 1,600 mg/m³ | OSHA P0

**Engineering measures**

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<thead>
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</thead>
</table>
| Apply technical measures to comply with the occupational exposure limits. | Provide adequate ventilation.

**Personal protective equipment**

**Respiratory protection**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.</td>
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</table>

**Hand protection**

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>Protective gloves</td>
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</table>

**Eye protection**

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<tbody>
<tr>
<td>Safety glasses with side-shields Ensure that eyewash stations and safety showers are close to the workstation location.</td>
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</table>

**Protective measures**

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<tbody>
<tr>
<td>Wear suitable protective equipment. When using do not eat, drink or smoke.</td>
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</table>

**Hygiene measures**

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<tbody>
<tr>
<td>Remove contaminated clothing and protective equipment before entering eating areas. Wash hands before breaks and immediately after handling the product.</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- **Appearance**: paste
- **Colour**: black
Odour: characteristic
Odour Threshold: No data available
pH: No data available
Melting point/range: No data available
Boiling point/boiling range: No data available
Flash point: Not applicable
Evaporation rate: Not applicable
Burning rate: No data available
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Relative density: No data available
Bulk density: No data available
Solubility(ies)
  Water solubility: insoluble
  Solubility in other solvents: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: not determined
Thermal decomposition: No data available
Viscosity
  Viscosity, dynamic: Not applicable
  Viscosity, kinematic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Refractive index: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage conditions.
No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed.

Possibility of hazardous reactions: No hazards to be specially mentioned.

Conditions to avoid: Incompatible materials

Incompatible materials: Incompatible with oxidizing agents.
Incompatible with strong acids and bases.

Hazardous decomposition products: Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
inhalation (dust/mist/fume)
inhalation (vapour)
Skin
Eye contact
Ingestion

Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity: Remarks: No data available
Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: Remarks: No data available
Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:
glass, oxide, chemicals:
Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg

solvent naphtha (petroleum), light, aromatic:
Acute oral toxicity: LD50 Oral (Rat): 8,400 mg/kg
Acute inhalation toxicity: LC50 (Rat): 3400 ppm
Exposure time: 4 h

Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg

solvent naphtha (petroleum), heavy, aromatic:
Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg
solvent naphtha (petroleum), light aliph. (benzene content < 0.1%):
Acute oral toxicity: LD50 Oral (Mouse): 5,000 mg/kg
Acute dermal toxicity: LD50 Dermal (Rabbit): 3,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitisation
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity
May cause genetic defects.

Carcinogenicity
May cause cancer.

IARC
Group 2A: Probably carcinogenic to humans
glass, oxide, chemicals 65997-17-3

Group 2B: Possibly carcinogenic to humans
solvent naphtha (petroleum), light aliph. (benzene content < 0.1%) 64742-89-8
glass, oxide, chemicals 65997-17-3

ACGIH
Confirmed animal carcinogen with unknown relevance to humans
solvent naphtha (petroleum), light, aromatic 64742-95-6
solvent naphtha (petroleum), heavy, aromatic 64742-94-5
Trade Secret Iron cobalt chromite compound

glass, oxide, chemicals 65997-17-3

OSHA
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Ecotoxicology Assessment
Acute aquatic toxicity: This product has no known ecotoxicological effects.

Chronic aquatic toxicity: This product has no known ecotoxicological effects.

Components:
glass, oxide, chemicals:
Toxicity to fish: LC50 (Fish): > 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia (water flea)): > 100 mg/l
Exposure time: 48 h

Toxicity to algae: IC50 (algae): > 1,000 mg/l
Exposure time: 72 h

solvent naphtha (petroleum), light, aromatic:
Toxicity to fish: LC50 (Fish): 9.22 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia (water flea)): 6.14 mg/l
Exposure time: 48 h

Persistence and degradability

Product:
Biodegradability: Remarks: No data available

Components:
Trade Secret Iron cobalt chromite compound:
Biodegradability: Remarks: No data available

solvent naphtha (petroleum), light, aromatic:
Biodegradability: Remarks: No data available

solvent naphtha (petroleum), heavy, aromatic:
Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:
Bioaccumulation : Remarks: No data available

Components:
Trade Secret Iron cobalt chromite compound:
Bioaccumulation : Remarks: No data available

solvent naphtha (petroleum), light, aromatic:
Bioaccumulation : Remarks: No data available

solvent naphtha (petroleum), heavy, aromatic:
Bioaccumulation : Remarks: No data available

Mobility in soil

Product:
Distribution among environmental compartments : Remarks: No data available

Components:
Trade Secret Iron cobalt chromite compound:
Distribution among environmental compartments : Remarks: No data available

solvent naphtha (petroleum), light, aromatic:
Distribution among environmental compartments : Remarks: No data available

solvent naphtha (petroleum), heavy, aromatic:
Distribution among environmental compartments : Remarks: No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of wastes in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

International Regulation
UNRTDG
Not regulated as a dangerous good

**IATA-DGR**
Not regulated as a dangerous good

**IMDG-Code**
Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

<table>
<thead>
<tr>
<th>Pollution category</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship type</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**National Regulations**

**49 CFR DOT**
Not regulated as a hazardous material

### SECTION 15. REGULATORY INFORMATION

**TSCA list**
- TSCA 5a - Not relevant
- TSCA_12b - Not relevant

**SARA 311/312 Hazards**
- Chronic Health Hazard

**SARA 302**
- No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**
- This product contains components that are reportable under the regulation.

**Massachusetts Right To Know**
- No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know**
- This product contains components that are reportable under the regulation.

**New Jersey Right To Know**
- This product contains components that are reportable under the regulation.

**California Prop 65**
- WARNING! This product contains a chemical known to the State of California to cause cancer.

**The components of this product are reported in the following inventories:**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACH</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>CH INV</td>
<td>Not in compliance with the inventory</td>
</tr>
<tr>
<td>TSCA</td>
<td>On TSCA Inventory</td>
</tr>
<tr>
<td>DSL</td>
<td>All components of this product are on the Canadian DSL.</td>
</tr>
</tbody>
</table>
AICS : Not in compliance with the inventory
NZIoC : On the inventory, or in compliance with the inventory
ENCS : Not in compliance with the inventory
ISHL : Not in compliance with the inventory
KECI : Not in compliance with the inventory
PICCS : Not in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory

Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECl (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA), CH INV (Switzerland), MY INV (Malaysia), TR INV (Turkey), TW INV (Taiwan)

SECTION 16. OTHER INFORMATION

The information provided in this 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.