



Material Safety Data Sheet

Issuing Date 27-Apr-2011

Revision Date 17-Aug-2012

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 38204000
Product Code(s) 884313
Recommended Use Traffic paint
Product Technology Thermo

Supplier Address

Ennis-Flint
5910 North Central Expressway
Suite 1050
Dallas TX 75206
T: 800.331.8118
800.331.8118 (For Technical Inquiries)

Chemical Emergency Phone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Harmful if swallowed, inhaled, or absorbed through skin
May cause respiratory impairment and lung damage
May adversely affect central nervous system, kidneys, blood and reproductive system
Cancer hazard
WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm
WARNING! This product contains a chemical known in the State of California to cause cancer.

Appearance Yellow

Physical State Solid.

Odor Odorless

Potential Health Effects

Acute Toxicity

Eyes

May cause slight irritation. The molten product can cause serious burns.

Skin

Harmful if absorbed through skin. May cause irritation. The molten product can cause serious burns.

Inhalation

Harmful by inhalation. May cause ulceration and perforation of the nasal septum. Excessive inhalation of vapors in molten state can cause nose and throat irritation, may cause nervous system depression characterized by headache, dizziness, nausea, staggering gait, confusion and unconsciousness. In molten state, the material does not give off fumes that are toxic or injurious to persons or property.

Ingestion

Harmful if swallowed.

| | |
|--------------------------------------|--|
| Chronic Effects | Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Inorganic lead compounds can cause developmental damage. Very slowly eliminated from the body, so poisoning can be cumulative. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Chromium and chromium compounds are currently classified by IARC and National Toxicology Program as known carcinogens. |
| Main Symptoms | Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness |
| Aggravated Medical Conditions | Pre-existing eye disorders. Skin disorders. Respiratory disorders. Central nervous system. Blood disorders. Reproductive system. |
| Environmental Hazard | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|--|------------|----------|
| Limestone | 1317-65-3 | 30-60 |
| Glass, oxide | 65997-17-3 | 15-40 |
| Paraffin | 8002-74-2 | 7-13 |
| Chrome yellow (Lead chromate pigment) | 1344-37-2 | 7-13 |
| Quartz | 14808-60-7 | 1-5 |
| Titanium dioxide | 13463-67-7 | 1-5 |
| Calcium carbonate | 471-34-1 | 1-5 |
| Molybdate orange (Lead chromate pigment) | 12656-85-8 | 0.1-1 |
| Antimony trioxide | 1309-64-4 | <0.1 |

4. FIRST AID MEASURES

| | |
|-----------------------------------|---|
| General Advice | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. |
| Eye Contact | In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Call a physician immediately. |
| Skin Contact | Wash off immediately with plenty of water. In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Removal of solidified molten material from skin requires medical assistance. If burned by contact with molten material, remove patient from heat source. Remove smoldering clothing, including shoes, boots and jewelry. Cool the burn with water or saline until the skin returns to normal temperature. Cover patient with dry clean sheet. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Do not use ice. Conduct primary survey. If indicated transport patient to emergency treatment facility. |
| Inhalation | Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Call a physician immediately. |
| Ingestion | Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. |
| Notes to Physician | Treat symptomatically. |
| Protection of First-aiders | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

5. FIRE-FIGHTING MEASURES

| | | | | |
|--|--|-----------------------|--------------------------|--|
| Flammable Properties | Not flammable. | | | |
| Flash Point | Not applicable. | | | |
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | | | |
| Hazardous Combustion Products | Lead and chromium compounds. | | | |
| Explosion Data | | | | |
| Sensitivity to Mechanical Impact | None. | | | |
| Sensitivity to Static Discharge | None | | | |
| 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. | | | |
| NFPA | Health Hazard 2 | Flammability 0 | Instability 0 | Physical and Chemical Hazards - |
| HMIS | Health Hazard 2* | Flammability 0 | Physical Hazard 0 | Personal Protection X |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|---|
| Personal Precautions | Use personal protective equipment. Stop leak if you can do it without risk. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid dust formation. Avoid contact with skin, eyes and clothing. |
| Environmental Precautions | Prevent entry into waterways, sewers, basements or confined areas. Do not allow material to contaminate ground water system. Should not be released into the environment. |
| Methods for Containment | Cover powder spill with plastic sheet or tarp to minimize spreading. Prevent dust cloud. |
| Methods for Cleaning Up | Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading. Take up mechanically and collect in suitable container for disposal. |

7. HANDLING AND STORAGE

| | |
|-----------------|---|
| Handling | <p>Wear personal protective equipment. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Avoid dust formation. Wash thoroughly after handling.</p> <p>Do not heat over 500°F in a closed container. This product when heated to above 500°F can lead to flashing. Appropriate protective equipment must be worn when mixing and applying this product.</p> <p>The thermoplastic bag can be hazardous when empty, because it can retain product residue. Therefore do not reuse container for food, clothing, or products for human or animal consumption or where skin contact may occur. Always obey hazard warnings and handle containers as if they were full.</p> <p>The meltable bag is compatible with the thermoplastic allowing them to melt and become part of the hot melt mixture at application temperature.</p> |
| Storage | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Do not contaminate food or feed stuffs. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|--|---|---|
| Limestone 1317-65-3 | - | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |
| Paraffin 8002-74-2 | TWA: 2 mg/m ³ | (vacated) TWA: 2 mg/m ³ | TWA: 2 mg/m ³ |
| Chrome yellow (Lead chromate pigment) 1344-37-2 | TWA: 0.05 mg/m ³ Pb | TWA: 5 µg/m ³ TWA: 50 µg/m ³ Pb Action Level: 2.5 µg/m ³ Cr Action Level: 30 µg/m ³ Pb Poison, See 29 CFR 1910.1025 | IDLH: 100 mg/m ³ Pb TWA: 0.050 mg/m ³ Pb |
| Calcium carbonate 471-34-1 | - | TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³ | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |
| Quartz 14808-60-7 | TWA: 0.025 mg/m ³ respirable fraction | 30/(%SiO ₂ +2) mg/m ³ TWA, Total Dust; 250/(%SiO ₂ +5) mppcf TWA, respirable fraction; 10/(%SiO ₂ +2) mg/m ³ TWA, respirable TWA: 0.1 mg/m ³ (vacated) | IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust |
| Titanium dioxide 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust | IDLH: 5000 mg/m ³ |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and Body Protection

Protective gloves. Long sleeved clothing. Protective shoes or boots

Respiratory Protection

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.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------------------|------------------------|------------------------------------|----------------|
| Appearance | Yellow. | Odor | Odorless. |
| Odor Threshold | Not applicable | Physical State | Solid |
| pH | Not applicable | | |
| Flash Point | Not applicable. | Autoignition Temperature | Not applicable |
| Decomposition Temperature | Not applicable | Boiling Point/Boiling Range | Not applicable |
| Melting Point/Range | 95-120 °C / 203-248 °F | | |
| | | Flammability Limits in Air | Not applicable |
| Explosion Limits | Not applicable | | |
| Specific Gravity | 1.7-2.3 | Water Solubility | Insoluble |
| Solubility | Not applicable | Evaporation Rate | Not applicable |
| Vapor Pressure | Not applicable | Vapor Density | Not applicable |
| VOC (g/l) | 0 g/l | | |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under recommended storage conditions. |
| Incompatible Products | None known based on information supplied. |
| Conditions to Avoid | Dust formation. |
| Hazardous Decomposition Products | Lead and chromium compounds. |
| Hazardous Polymerization | Hazardous polymerization does not occur. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Harmful if swallowed, inhaled, or absorbed through skin.

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------------------|-----------------------|-------------------------|--------------------------|
| Paraffin | > 3750 mg/kg (Rat) | > 3600 mg/kg (Rabbit) | - |
| Chrome yellow (Lead chromate pigment) | > 5000 mg/kg (Rat) | | |
| Calcium carbonate | = 6450 mg/kg (Rat) | | |
| Quartz | 500 mg/kg (Rat) | | |
| Phthalate plasticizer | > 9750 mg/kg (Rat) | | >4.4 mg/L (Rat) 4 h |
| Titanium dioxide | > 10000 mg/kg (Rat) | | > 6820 mg/m ³ |

Chronic Toxicity

Chronic Toxicity

Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Inorganic lead compounds can cause developmental damage. Very slowly eliminated from the body, so poisoning can be cumulative. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Chromium and chromium compounds are currently classified by IARC and National Toxicology Program as known carcinogens.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--|-------|---------------------|---------------------------------|------|
| Glass, oxide | | Group 3 | | |
| Chrome yellow (Lead chromate pigment) | A3 | Group 2A Group 1 | Known Reasonably Anticipated | X |
| Quartz | A2 | Group 1 | Known | X |
| Titanium dioxide | | Group 2B | | X |
| Molybdate orange (Lead chromate pigment) | A3 | Group 2A Group 1 | Reasonably Anticipated | X |
| Antimony trioxide | A2 | Group 2B | | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3: Not Classifiable as to its Carcinogenicity to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity

Reproductive effects of lead have been shown on the male reproductive system and on fertility in humans exposed to lead.

| | |
|-------------------------------|--|
| Developmental Toxicity | It is anticipated that lead will affect the developing fetus and has been shown to cause embryo-toxic and fetotoxic effects in animals studies. No teratogenic effects were noted. |
| Teratogenic | May cause harm to the unborn child. |
| Target Organ Effects | Eyes. Lungs. Respiratory system. Skin. Central nervous system (CNS). Blood. Reproductive system. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|--|---|--|----------------------------|--|
| Chrome yellow (Lead chromate pigment) | | LC50 96 h: > 10000 mg/L static (Leuciscus idus) | EC50 > 10000 mg/L 30 min | |
| Molybdate orange (Lead chromate pigment) | | LC50 96 h: = 2500 mg/L static (Leuciscus idus) | | |
| Antimony trioxide | EC50 72 h: 0.63 - 0.8 mg/L (Pseudokirchneriella subcapitata) EC50 96 h: 0.65 - 0.81 mg/L (Pseudokirchneriella subcapitata) | LC50 96 h: > 1000 mg/L static (Brachydanio rerio) LC50 96 h: > 80 mg/L static (Pimephales promelas) | EC50 > 3.5 mg/L 7 h | EC50 48 h: 361.5 - 496.0 mg/L Static (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna) |

13. DISPOSAL CONSIDERATIONS

| | |
|-------------------------------|---|
| Waste Disposal Methods | This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. |
|-------------------------------|---|

| | |
|-------------------------------|---------------------------------|
| Contaminated Packaging | Do not re-use empty containers. |
|-------------------------------|---------------------------------|

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

| Chemical Name | California Hazardous Waste |
|--|---------------------------------|
| Chrome yellow (Lead chromate pigment) | Toxic Corrosive Ignitable |
| Molybdate orange (Lead chromate pigment) | Toxic Corrosive Ignitable |
| Antimony trioxide | Toxic |

14. TRANSPORT INFORMATION

| | |
|-----------------------------|---|
| DOT | Not regulated (Product as shipped) |
| Proper shipping name | Elevated temperature liquid, n.o.s. (Product in use) |
| Description | ELEVATED TEMPERATURE MATERIAL, LIQUID, N.O.S.(COMPOUND PAVEMENT MARKING), 9, UN 3257, III. (Product in use) |
| TDG | Not regulated |
| MEX | Not regulated |
| ICAO | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |

15. REGULATORY INFORMATION

International Inventories

| | |
|-------------|--|
| TSCA | All components are listed on the TSCA Inventory. |
| DSL | All components are listed either on the DSL or NDSL. |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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 | CAS-No | Weight % | SARA 313 - Threshold Values % |
|--|------------|----------|-------------------------------|
| Chrome yellow (Lead chromate pigment) | 1344-37-2 | 7-13 | 0.1 |
| Molybdate orange (Lead chromate pigment) | 12656-85-8 | 0.1-1 | 0.1 |

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

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 |
|--|-----------------------------|------------------------|---------------------------|----------------------------|
| Chrome yellow (Lead chromate pigment) | | X | | |
| Molybdate orange (Lead chromate pigment) | | X | | |
| Antimony trioxide | 1000 lb | X | | 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 | Extremely Hazardous Substances RQs | RQ |
|-------------------|--------------------------|------------------------------------|---|
| Antimony trioxide | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|---------------------------------------|------------|---|
| Chrome yellow (Lead chromate pigment) | 1344-37-2 | Carcinogen Developmental Female Reproductive Male Reproductive |
| Quartz | 14808-60-7 | Carcinogen |
| Titanium dioxide | 13463-67-7 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|---------------------------------------|------------|---------------|--------------|----------|--------------|
| Limestone | X | X | X | | X |
| Paraffin | X | X | X | - | X |
| Chrome yellow (Lead chromate pigment) | | | X | X | X |
| Quartz | X | X | X | - | X |
| Diisononyl phthalate | | | X | | |
| Titanium dioxide | X | X | X | - | X |

International Regulations

| Chemical Name | Carcinogen Status | Exposure Limits |
|--|-------------------|--|
| Limestone | | Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³ |
| Paraffin | | Mexico: TWA= 2 mg/m ³ Mexico: STEL= 6 mg/m ³ |
| Chrome yellow (Lead chromate pigment) | A1 A3 | Mexico: TWA 0.15 mg/m ³ Mexico: TWA 0.01 mg/m ³ |
| Quartz | | Mexico: TWA= 0.1 mg/m ³ |
| Titanium dioxide | | Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³ |
| Molybdate orange (Lead chromate pigment) | A3 | Mexico: TWA 0.15 mg/m ³ |
| Antimony trioxide | A2 | Mexico: TWA 0.5 mg/m ³ Mexico: TWA 1 mg/m ³ |

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials

**Canadian National Pollutant Release Inventory (NPRI)**

| Component | NPRI |
|--|------|
| Chrome yellow (Lead chromate pigment) 1344-37-2 (7-13) | X |
| Molybdate orange (Lead chromate pigment) 12656-85-8 (0.1-1) | X |
| Antimony trioxide 1309-64-4 (<0.1) | X |

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date 27-Apr-2011
Revision Date 17-Aug-2012
Revision Note (M)SDS sections updated: 1, 2, 4, 7, 9

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide 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 material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

End of Safety Data Sheet