

SAFETY DATA SHEET

1407093		GS LA T LMM-6000 Aerosol Spray Can	
Product specification	RS_FP_603544	Revision Date	11/02/2015
Version	1	Print Date	11/30/2015
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SECTION 1. IDENTIFICATION

Product name : GS LA T LMM-6000 Aerosol Spray Can
000000000001407093

Product code : RS_FP_603544

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
Number

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

Flammable aerosols : Category 1

Eye irritation : Category 2A

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1A

Reproductive toxicity : Category 1A

Specific target organ toxicity : Category 1
- single exposure

Specific target organ toxicity : Category 3 (Respiratory system, Central nervous system)
- single exposure

Specific target organ toxicity : Category 1
- repeated exposure

GHS Label element

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Hazard pictograms : 

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.
P281 Use personal protective equipment as required.
Response:
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

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None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : silicatic material, metal oxide/hydroxide, alcohol, hydrocarbon, aliphatic

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
ethanol	64-17-5	>= 20 - < 30
propane	74-98-6	>= 20 - < 30
Trade Secret Molybdenum Compound	Not Assigned	>= 5 - < 10
Trade Secret Mica compound	Not Assigned	>= 1 - < 5
Trade Secret Vanadium Compound	Not Assigned	>= 0.1 - < 1
2-butoxyethanol	111-76-2	>= 0.1 - < 1

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 : Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

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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.
- Specific extinguishing methods :
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- 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.
Keep away from heat and sources of ignition.
- Conditions for safe storage : Keep in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethanol	64-17-5	TWA	1,000 ppm	NIOSH REL

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			1,900 mg/m3	
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0
		STEL	1,000 ppm	ACGIH
propane	74-98-6	TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0
Trade Secret Molybdenum Compound		TWA	5 mg/m3 (Molybdenum)	OSHA Z-1
		TWA (Respirable fraction)	0.5 mg/m3 (Molybdenum)	ACGIH
		TWA	5 mg/m3 (Molybdenum)	OSHA P0
Trade Secret Mica compound		TWA (Respirable fraction)	3 mg/m3	ACGIH
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	3 mg/m3	NIOSH REL
		TWA (respirable dust fraction)	3 mg/m3	OSHA P0
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-butoxyethanol	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g Creatinine	ACGIH BEI

Engineering measures : Apply technical measures to comply with the occupational exposure limits.
Provide adequate ventilation.

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Personal protective equipment

- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hand protection
Material : Protective gloves
- Eye protection : Safety glasses with side-shields
Ensure that eyewash stations and safety showers are close to the workstation location.
- Protective measures : Wear suitable protective equipment.
Avoid contact with skin.
When using do not eat, drink or smoke.
- Hygiene measures : Remove contaminated clothing and protective equipment before entering eating areas.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : aerosol
- Colour : coloured
- 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 : 14 °C
Method: calculated
not write protected
- Evaporation 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)

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Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Viscosity	
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No data available
Chemical stability	: No data available
Possibility of hazardous reactions	: No data available
Conditions to avoid	: Incompatible materials
Incompatible materials	: Incompatible with oxidizing agents. Incompatible with strong acids and bases.

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	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
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Acute inhalation toxicity	: Acute toxicity estimate : > 10 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
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Components:**ethanol:**

Acute oral toxicity	: LD50 Oral (Rat): 7,060 mg/kg
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Acute inhalation toxicity	: LC50 (Rat): 124.7 mg/l Exposure time: 4 h
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propane:

Acute inhalation toxicity : LC50 (Rat): 658 mg/l
 Exposure time: 4 h

Trade Secret Molybdenum Compound:

Acute inhalation toxicity : LC50 (Rat): > 5,840 mg/m³
 Exposure time: 4 h

Trade Secret Vanadium Compound:

Acute inhalation toxicity : LC50 (Rat): 7,800 µg/m³
 Exposure time: 4 h

2-butoxyethanol:

Acute oral toxicity : LD50 Oral (Rat): 470 mg/kg

Acute dermal toxicity : Acute toxicity estimate : 1,100 mg/kg
 Method: Converted acute toxicity point estimate

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye irritation.

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 1: Carcinogenic to humans

ethanol 64-17-5

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

2-butoxyethanol 111-76-2

Trade Secret Molybdenum
 Compound

ethanol 64-17-5

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.

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Reproductive toxicity

May damage fertility or the unborn child.

STOT - single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs.

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****ethanol:**

Toxicity to fish : LC50 (Fish): 12 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : LC50 (Daphnia (water flea)): 9,268 mg/l
aquatic invertebrates Exposure time: 48 h

Trade Secret Vanadium Compound:

Toxicity to fish : LC50 (Fish): 1.5 mg/l
Exposure time: 144 h

2-butoxyethanol:

Toxicity to fish : LC50 (Fish): 1,490 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 1,698 mg/l
aquatic invertebrates Exposure time: 24 h

Persistence and degradability**Components:****ethanol:**

Biodegradability : Remarks: No data available

propane:

Biodegradability : Remarks: No data available

Trade Secret Molybdenum Compound:

Biodegradability : Remarks: No data available

Trade Secret Mica compound:

Biodegradability : Remarks: No data available

Trade Secret Vanadium Compound:

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Biodegradability : Remarks: No data available

2-butoxyethanol:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

ethanol:

Bioaccumulation : Remarks: No data available

propane:

Bioaccumulation : Remarks: No data available

Trade Secret Molybdenum Compound:

Bioaccumulation : Remarks: No data available

Trade Secret Mica compound:

Bioaccumulation : Remarks: No data available

Trade Secret Vanadium Compound:

Bioaccumulation : Remarks: No data available

2-butoxyethanol:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

ethanol:

Distribution among environmental compartments : Remarks: No data available

propane:

Distribution among environmental compartments : Remarks: No data available

Trade Secret Molybdenum Compound:

Distribution among environmental compartments : Remarks: No data available

Trade Secret Mica compound:

Distribution among environmental compartments : Remarks: No data available

Trade Secret Vanadium Compound:

Distribution among environmental compartments : Remarks: No data available

2-butoxyethanol:

Distribution among environmental compartments : Remarks: No data available

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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****IATA-DGR**

UN number : UN 1950
Proper shipping name : Aerosols, flammable
Class : 2.1
Packing group : Not assigned by regulation
Labels : 2.1
Packing instruction (cargo aircraft) : 203
Packing instruction (passenger aircraft) : 203

IMDG-Code

UN number : UN 1950
Proper shipping name : AEROSOLS
Class : 2.1
Packing group : Not assigned by regulation
Labels : 2.1
EmS Code : F-D, S-U
Marine pollutant : no

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

Not applicable for product as supplied.

National Regulations**49 CFR DOT**

UN/ID/NA number : UN
1950
Proper shipping name : Aerosols
Class : 2.1
Packing group : Not assigned by regulation
Labels : 2.1
ERG Code : 126
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION**TSCA list** : TSCA 5a - Not relevant

TSCA_12b - Not relevant

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- SARA 311/312 Hazards** : Fire Hazard
Chronic Health Hazard
- SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Trade Secret Molybdenum Compound

Massachusetts Right To Know

ethanol	64-17-5
propane	74-98-6
Trade Secret Molybdenum Compound	
Trade Secret Mica compound	
quartz	14808-60-7

Pennsylvania Right To Know

ethanol	64-17-5
propane	74-98-6
Trade Secret Molybdenum Compound	
Trade Secret Mica compound	
Trade Secret Vanadium Compound	
ethyl acetate	141-78-6

New Jersey Right To Know

ethanol	64-17-5
propane	74-98-6
Trade Secret Molybdenum Compound	
Trade Secret Mica compound	
2-butoxyethanol	111-76-2

California Prop 65

	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
ethanol	64-17-5
	WARNING! This product contains a chemical known to the State of California to cause cancer.
ethanol	64-17-5
quartz	14808-60-7

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

- REACH : Not in compliance with the inventory
- : Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite
- CH INV : Not in compliance with the inventory

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- : Trade Secret Mica compound
- : Trade Secret cellulose compound
- : polymer substances
- TSCA : Not On TSCA Inventory
- : polymer substances
- DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.
- : polymer substances
- AICS : Not in compliance with the inventory
- : polymer substances
- NZIoC : Not in compliance with the inventory
- : polymer substances
- ENCS : Not in compliance with the inventory
- : Trade Secret Mica compound
- : Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite
- : polymer substances
- ISHL : Not in compliance with the inventory
- : Trade Secret Mica compound
- : Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite
- : polymer substances
- KECI : Not in compliance with the inventory
- : polymer substances
- PICCS : Not in compliance with the inventory
- : polymer substances
- IECSC : Not in compliance with the inventory
- : polymer substances

Inventories

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

SECTION 16. OTHER INFORMATION

Revision Date : 11/02/2015

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.