

According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

LA LMC-6044P Spray		GSLA_LMC-6044P Black Aerosol Can	
Product specification	11800	Revision Date	04/19/2018
Version	2.6	Print Date	06/18/2018
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SECTION 1. IDENTIFICATION

Product name : LA LMC-6044P Spray

GSLA LMC-6044P Black Aerosol Can

Material number : 1379493

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

Emergency telephone number

In-Country Number : (800)424-9300

CHEMTREC Global Number : +(1)-703-527-3887(Call Collect)

Recommended use of the chemical and restrictions on use

Recommended use : Consult the technical guidelines for the use of this

substance/mixture.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Gases under pressure : Category 1

GHS Label element

Hazard pictograms



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may

explode if heated.

Precautionary statements : **Prevention:**

P210 Keep away from heat/sparks/open

flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or



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other ignition source.

P251 Pressurized container: Do not pierce

or burn, even after use.

Storage:

P410 + P412 Protect from sunlight. Do not expose

to temperatures exceeding 50 °C/

122 °F.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : organic solvent, glass/frit, inorganic pigment, extremely

flammable liquefied gas, glycol ether/-acetate, hydrocarbon,

aliphatic

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
ethanol	64-17-5	>= 20 - < 30
butane	106-97-8	>= 10 -< 20
isobutane	75-28-5	>= 5 - < 10
2-methoxy-1-methylethyl acetate	108-65-6	>= 5 - < 10
propane	74-98-6	>= 5 - < 10

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 : None known.



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and effects, both acute and delayed

SECTION 5. FIREFIGHTING MEASURES

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.

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 protection against

fire and explosion

: Keep away from heat and sources of ignition.

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



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Components	CAS-No.	Value type	Control	Basis
Components	0/10/110.	(Form of	parameters /	Dasis
		exposure)	Permissible	
		-	concentration	
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm	NIOSH REL
			1,900 mg/m3	
		TWA	1,000 ppm	OSHA Z-1
			1,900 mg/m3	
		TWA	1,000 ppm	OSHA P0
			1,900 mg/m3	
		STEL	1,000 ppm	ACGIH
butane	106-97-8	TWA	800 ppm	NIOSH REL
			1,900 mg/m3	
		TWA	800 ppm	OSHA P0
			1,900 mg/m3	
		STEL	1,000 ppm	ACGIH
isobutane	75-28-5	TWA	800 ppm	NIOSH REL
			1,900 mg/m3	
		STEL	1,000 ppm	ACGIH
2-methoxy-1-methylethyl	108-65-6	TWA	50 ppm	US WEEL
acetate				
propane	74-98-6	TWA	1,000 ppm	NIOSH REL
			1,800 mg/m3	
		TWA	1,000 ppm	OSHA Z-1
			1,800 mg/m3	
		TWA	1,000 ppm	OSHA P0
			1,800 mg/m3	

Engineering measures : Apply technical measures to comply with the occupational

exposure limits.

Provide adequate ventilation.

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.



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Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : aerosol

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 : 14 ℃

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Burning rate : No data available

Upper explosion limit : 19 %(V)

Lower explosion limit : 1.3 %(V)

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Bulk density : No data available

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : Not determined



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Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Refractive index : No data available

Volatile organic compounds

(VOC) content

: The following chemical(s) are listed under the U.S. Clean Air

Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR

60.489):

This product does not contain any VOC exemptions listed

under the U.S. Clean Air Act Section 450.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

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

Conditions to avoid : Extremes of temperature and direct sunlight.

Hazardous decomposition

products

: Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Components:

ethanol:

Acute oral toxicity : LD50 Oral (Rat): 10,470 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 15,800 mg/kg

butane:

Acute inhalation toxicity : LC50 (Rat, male and female): 658 g/m3

Exposure time: 4 h Test atmosphere: gas



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2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat, female): 8,532 mg/kg

LD50 (Rat, male): >= 10,000 mg/kg

Acute inhalation toxicity : (Rat, females): 16.48 mg/l

Exposure time: 8 h
Test atmosphere: vapour

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rat, male and female): >= 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Remarks: No adverse effect has been observed in acute

toxicity tests.

propane:

Acute inhalation toxicity : LC50 (Rat): 658 mg/l

Exposure time: 4 h
Test atmosphere: gas

Skin corrosion/irritation

Not classified based on available information.

Components:

ethanol:

Species: Rabbit Exposure time: 24 h

Method: OECD Test Guideline 404

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

ethanol:

Species: Rabbit

Result: Moderate eye irritation Method: OECD Test Guideline 405

Respiratory or skin sensitisation

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

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.



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IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

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 Specific Target Organ Toxicity - single exposure

Not classified based on available information.

STOT Specific Target Organ Toxicity - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Components:

ethanol:

Toxicity to daphnia and other : LC50 (Daphnia (water flea)): 9,268 mg/l

aquatic invertebrates Exposure time: 48 h

2-methoxy-1-methylethyl acetate:

Toxicity to fish : LC50 (Oryzias latipes (Orange-red killifish)): >= 100 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 408 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202



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GLP: yes

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

ethanol:

Biodegradability : Remarks: No data available

butane:

Biodegradability : Remarks: No data available

2-methoxy-1-methylethyl acetate:

Biodegradability : Remarks: No data available

propane:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

ethanol:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

: log Pow: -0.349 (24 °C)

butane:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

: log Pow: 2.745

2-methoxy-1-methylethyl acetate:

Bioaccumulation : Remarks: No data available

Partition coefficient: n- : log Pow: 0.43 (20 ℃)

octanol/water pH: 7

propane:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

: Remarks: No data available



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Mobility in soil

Product:

Distribution among : Remarks: No data available

environmental compartments

Components:

ethanol:

Distribution among : Remarks: No data available

environmental compartments

butane:

Distribution among : Remarks: No data available

environmental compartments

2-methoxy-1-methylethyl acetate:

Distribution among : Remarks: No data available

environmental compartments

propane:

Distribution among : Remarks: No data available

environmental compartments

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

SECTION 14. TRANSPORT INFORMATION

IATA-DGR

UN number : UN 1950

Proper shipping name : Aerosols, flammable

Class : 2.1



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Packing group : Not assigned by regulation

Labels : 2.1 Packing instruction (cargo : 203

aircraft)

Packing instruction : 203

(passenger aircraft)

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

Pollution category : N/A Ship type : N/A

National Regulations

49 CFR

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_12b - Not relevant

TSCA list : TSCA 5a - Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard



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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.

Chromium III CompoundsCobalt,

inorganic compounds

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product contains components that are reportable under the regulation.

This product contains components that are reportable under the regulation.

This product contains components that are reportable under the regulation.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains components that are reportable under the regulation.

Massachusetts Right To Know

This product contains components that are reportable under

the regulation.

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 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

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

EINECS (European Union) : On the inventory, or in compliance with the inventory

SWISS (Switzerland) : On the inventory, or in compliance with the inventory

TSCA (United States) : On TSCA Inventory

DSL/NDSL (Canada) : All components of this product are on the Canadian DSL.

AICS (Australia) : On the inventory, or in compliance with the inventory

NZioC (New Zealand) : On the inventory, or in compliance with the inventory



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ENCS (Japan) : On the inventory, or in compliance with the inventory

ISHL (Japan) : Not in compliance with the inventory

KECI (Korea) : On the inventory, or in compliance with the inventory

PICCS (Philippines) : On the inventory, or in compliance with the inventory

IECSC (China) : On the inventory, or in compliance with the inventory

TCSI (Taiwan) : On the inventory, or in compliance with the inventory

CICR (Turkey) : On the inventory, or in compliance with the inventory

INSQ (Mexico) : Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 04/19/2018

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.

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