

# SAFETY DATA SHEET

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

LA LMM-6000		GSLA_LMM-6000 Black Paste 250g	
Product specification	RS_FP_603463	Revision Date	08/18/2020
Version	4.1	Print Date	02/28/2022
Material number	1411218	Page	Page 1 of 21

## SECTION 1. IDENTIFICATION

Product name : **LA LMM-6000**  
GSLA\_LMM-6000 Black Paste 250g

Material number : **1411218**

### Manufacturer or supplier's details

Company name of supplier : RINSYUNDOU Co.,Ltd  
Address : SUNMAX Building4-47 Nakagawara, Gifu City, GIFU-Pref.  
Postal Code : 502-0013  
Telephone : 058-294-7333

### 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 liquids : Category 2  
Acute toxicity (Oral) : Category 4  
Eye irritation : Category 2A  
Germ cell mutagenicity : Category 1B  
Carcinogenicity : Category 1A  
Specific target organ toxicity - single exposure : Category 1  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

### GHS Label element

Hazard pictograms :



Signal word : **Danger**

Hazard statements : H225 Highly flammable liquid and vapour.

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	H302	Harmful if swallowed.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H340	May cause genetic defects.
	H350	May cause cancer.
	H370	Causes damage to organs.
Precautionary statements	: <b>Prevention:</b>	
	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.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	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 wellventilated area.
	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
	<b>Response:</b>	
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep 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.
	P370 + P378	In case of fire: Use dry sand, dry

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chemical or alcohol-resistant foam to extinguish.

#### Storage:

P403 + P233

Store in a well-ventilated place.  
Keep container tightly closed.

P403 + P235

Store in a well-ventilated place.  
Keep cool.

#### 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 : Paint

#### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
ethanol	64-17-5	>= 30 - < 50
Molybdenum(VI) oxide	1313-27-5	>= 30 - < 50
mica	12001-26-2	>= 5 - < 10
ethyl acetate	141-78-6	>= 1 - < 5
ammonium metavanadate	7803-55-6	>= 1 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 5
methanol	67-56-1	>= 1 - < 5
propane-1,2-diol	57-55-6	>= 1 - < 5
n-butyl acetate	123-86-4	>= 0.1 - < 1
4-methylpentan-2-one	108-10-1	>= 0.1 - < 1
quartz	14808-60-7	>= 0.1 - < 1
solvent naphtha (petroleum), light, aromatic	64742-95-6	>= 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.

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- 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 genetic defects.  
May cause cancer.  
Causes damage to organs.

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## 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.  
Do not use a solid water stream as it may scatter and spread fire.  
Burning produces irritant fumes.  
Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : No hazardous combustion products are known
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
In the event of fire and/or explosion do not breathe fumes.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## 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.

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## 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.

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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	ACGIH
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA P0
		STEL	1,000 ppm	ACGIH
Molybdenum(VI) oxide	1313-27-5	TWA	5 mg/m <sup>3</sup> (Molybdenum)	OSHA Z-1
		TWA (Respirable fraction)	0.5 mg/m <sup>3</sup> (Molybdenum)	ACGIH
		TWA	5 mg/m <sup>3</sup> (Molybdenum)	OSHA P0
mica	12001-26-2	TWA (Respirable fraction)	3 mg/m <sup>3</sup>	ACGIH
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	3 mg/m <sup>3</sup>	NIOSH REL
		TWA (respirable dust fraction)	3 mg/m <sup>3</sup>	OSHA P0
ethyl acetate	141-78-6	TWA	400 ppm	ACGIH
		TWA	400 ppm 1,400 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 1,400 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 1,400 mg/m <sup>3</sup>	OSHA P0
ammonium metavanadate	7803-55-6	C (Dust)	0.05 mg/m <sup>3</sup> (Vanadium)	NIOSH REL
		C (Fumes)	0.05 mg/m <sup>3</sup> (Vanadium)	NIOSH REL

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2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m <sup>3</sup>	NIOSH REL
		ST	250 ppm 325 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm 260 mg/m <sup>3</sup>	OSHA Z-1
		TWA	200 ppm 260 mg/m <sup>3</sup>	OSHA P0
		STEL	250 ppm 325 mg/m <sup>3</sup>	OSHA P0
propane-1,2-diol	57-55-6	TWA	10 mg/m <sup>3</sup>	US WEEL
4-methylpentan-2-one	108-10-1	TWA	20 ppm	ACGIH
		STEL	75 ppm	ACGIH
		TWA	50 ppm 205 mg/m <sup>3</sup>	NIOSH REL
		ST	75 ppm 300 mg/m <sup>3</sup>	NIOSH REL
		TWA	100 ppm 410 mg/m <sup>3</sup>	OSHA Z-1
		TWA	50 ppm 205 mg/m <sup>3</sup>	OSHA P0
		STEL	75 ppm 300 mg/m <sup>3</sup>	OSHA P0
quartz	14808-60-7	TWA (Respirable fraction)	0.025 mg/m <sup>3</sup> (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m <sup>3</sup> (Silica)	NIOSH REL
		TWA (Respirable dust)	0.05 mg/m <sup>3</sup> (Silica)	OSHA CARC

### Hazardous components without workplace control parameters

Components	CAS-No.
n-butyl acetate	123-86-4
solvent naphtha (petroleum), light, aromatic	64742-95-6

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## Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI
4-methylpentan-2-one	108-10-1	methyl isobutyl ketone	Urine	End of shift (As soon as possible after exposure ceases)	1 mg/l	ACGIH BEI
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.

### Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection : Protective gloves  
 Material

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.

Hygiene measures : When using do not eat, drink or smoke.  
 : 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 : paste  
 Colour : yellow  
 Odour : characteristic

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Odour Threshold : No data available  
pH : No data available  
Melting point/range : No data available  
Flash point : 14 °C  
Method: calculated

Evaporation rate : No data available  
Burning rate : No data available  
Upper explosion limit : 19 %(V)

Lower explosion limit : 1.1 %(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 soluble  
Solubility in other solvents : No data available  
Partition coefficient: n-octanol/water : No data available  
Auto-ignition temperature : Not determined  
Decomposition temperature : No data available  
Viscosity  
Viscosity, kinematic : No data available  
Explosive properties : No data available  
Oxidizing properties : Not applicable  
Refractive index : No data available

Volatile organic compounds (VOC) content : 50 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.  
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.



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Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Incompatible materials Extremes of temperature and direct sunlight.
Incompatible materials	: Incompatible with oxidizing agents. Incompatible with strong acids and bases.
Hazardous decomposition products	: Stable under normal conditions.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

inhalation (dust/mist/fume)

inhalation (vapour)

Skin

Eye contact

### Acute toxicity

Not classified based on available information.

#### **Product:**

Acute oral toxicity : Acute toxicity estimate: 2,605 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation method

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

##### **Molybdenum(VI) oxide:**

Acute oral toxicity : LD50 (Rat, male and female): 4,461 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,840 mg/m3  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Target Organs: Mucous membranes  
GLP: yes  
Assessment: The substance or mixture has no acute

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inhalation toxicity

Remarks: No adverse effect has been observed in acute toxicity tests.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

**ethyl acetate:**

Acute oral toxicity : LD50 Oral (Rat): 6,100 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 22.5 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

Acute dermal toxicity : LD50 Dermal (Rabbit): > 18,000 mg/kg

**ammonium metavanadate:**

Acute oral toxicity : LD50 (Rat, male and female): 275.87 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

**2-butoxyethanol:**

Acute oral toxicity : LD50 Oral (Rat, male and female): 1,200 mg/kg  
Method: OECD Test Guideline 401  
GLP: no

Acute dermal toxicity : LD50 Dermal (Rabbit, male and female): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

**methanol:**

Acute oral toxicity **propane-** : LD50 Oral (Rat): 6,200 mg/kg

**1,2-diol:**  
Acute oral toxicity : LD50 Oral (Rat): 20 g/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 20,800 mg/kg

**n-butyl acetate:**

Acute oral toxicity : LD50 Oral (Rat): 10,768 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 17,600 mg/kg

**4-methylpentan-2-one:**

Acute oral toxicity : LD50 Oral (Rat): 2,080 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 3,000 mg/kg

**quartz:**

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Acute oral toxicity : LD50 Oral (Rat): 500 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity

***solvent naphtha (petroleum), light, aromatic:***

Acute oral toxicity : LD50 Oral (Rat, male and female): 8,400 mg/kg

Acute inhalation toxicity : LC50 (Rat): 8,000 - 10,000 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 Dermal (Rabbit, male and female): >= 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

## 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

***Molybdenum(VI) oxide:***  
Species: Rabbit  
Exposure time: 4 h  
Assessment: No skin irritation  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: yes

***2-butoxyethanol:*** Species:  
Rabbit  
Exposure time: 72 h  
Method: OECD Test Guideline 404  
Result: Irritating to skin.  
GLP: yes

***solvent naphtha (petroleum), light, aromatic:***

Species: Rabbit  
Result: Mild skin irritation

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Components:**

***ethanol:***

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Species: Rabbit  
Result: Eye irritation  
Method: OECD Test Guideline 405

**Molybdenum(VI) oxide:**

Species: Rabbit  
Result: Irritating to eyes.  
Assessment: Irritating to eyes.

**ethyl acetate:** Species:

Rabbit  
Result: No eye irritation

**ammonium metavanadate:**

Species: Rabbit  
Result: Irritating to eyes.  
Exposure time: 1 h  
Method: OECD Test Guideline 405  
GLP: yes

**2-butoxyethanol:**

Result: Eye irritation

**solvent naphtha (petroleum), light, aromatic:**

Species: Rabbit  
Result: Mild 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.

**Components: solvent naphtha (petroleum), light, aromatic:**

Germ cell mutagenicity - Assessment : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

**Carcinogenicity**

Not classified based on available information.

<b>IARC</b>	Group 1: Carcinogenic to humans	
	quartz	14808-60-7
	Group 2B: Possibly carcinogenic to humans	
	4-methylpentan-2-one	108-10-1

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

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carcinogen by OSHA.

## NTP

Known to be human carcinogen

quartz

14808-60-7

## Reproductive toxicity

Not classified based on available information.

**STOT Specific Target Organ Toxicity - single exposure** May cause respiratory irritation.

### Components:

#### ***Molybdenum(VI) oxide:***

Assessment: May cause respiratory irritation.

#### ***ammonium metavanadate:***

Assessment: May cause respiratory irritation.

#### ***solvent naphtha (petroleum), light, aromatic:***

Assessment: May cause respiratory irritation.

**STOT Specific Target Organ Toxicity - repeated exposure** Not classified based on available information.

## Aspiration toxicity

Not classified based on available information.

### Components:

***solvent naphtha (petroleum), light, aromatic:*** May be fatal if swallowed and enters airways.

## 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 aquatic invertebrates : LC50 (Daphnia (water flea)): 9,268 mg/l  
Exposure time: 48 h

##### ***Molybdenum(VI) oxide:***

Toxicity to fish : (Oncorhynchus mykiss (rainbow trout)): 100 mg/l  
Method: OECD Test Guideline 203

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	Remarks: No toxicity at the limit of solubility (Pimephales promelas (fathead minnow)): 370 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: Remarks: No toxicity at the limit of solubility (Daphnia magna (Water flea)): 100 mg/l Exposure time: 24 h Method: OECD Test Guideline 202 Remarks: No toxicity at the limit of solubility (Daphnia magna (Water flea)): 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: No toxicity at the limit of solubility
<b>ethyl acetate:</b> Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 220 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia (water flea)): 560 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (algae): 3,300 mg/l Exposure time: 48 h
<b>ammonium metavanadate:</b> Toxicity to fish	: LC50 (Marine species): 27.8 mg/l Exposure time: 96 h Test Type: flow-through test
Ecotoxicology Assessment Acute aquatic toxicity	: This product has no known ecotoxicological effects.
Chronic aquatic toxicity	: This product has no known ecotoxicological effects.
<b>2-butoxyethanol:</b> Toxicity to fish	: LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,490 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1,800 mg/l Exposure time: 48 h
<b>methanol:</b> Toxicity to fish	: LC50 (Fish): 28,200 mg/l Exposure time: 96 h

**propane-1,2-diol:**

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Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 51,400 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 10,000 mg/l  
Exposure time: 96 h

Toxicity to algae : EC50 (algae): 19,000 mg/l  
Exposure time: 96 h

#### ***n-butyl acetate:***

Toxicity to fish : LC50 (Fish): 17 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 72.8 mg/l  
Exposure time: 24 h

Toxicity to algae : EC50 (algae): 674.7 mg/l  
Exposure time: 72 h

#### ***4-methylpentan-2-one:***

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 496 - 514 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 170 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (algae)): 400 mg/l  
Exposure time: 96 h

#### ***solvent naphtha (petroleum), light, aromatic:***

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 12 mg/l  
Exposure time: 48 h  
Test Type: static test

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (algae)): 1.1 mg/l  
Exposure time: 72 h  
Test Type: static test

#### **Persistence and degradability**

##### **Product:**

Biodegradability : Remarks: No data available

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

LA LMM-6000	RS_FP_603463	GSLA_LMM-6000 Black Paste 250g	
Product specification	RS_FP_603463	Revision Date	08/18/2020
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## Components:

### **ethanol:**

Biodegradability : Remarks: No data available

### **Molybdenum(VI) oxide:**

Biodegradability : Remarks: No data available

### **mica:**

Biodegradability : Remarks: No data available

### **ethyl acetate:**

Biodegradability : Remarks: No data available

### **ammonium metavanadate:**

Biodegradability : Remarks: No data available

### **2-butoxyethanol:**

Biodegradability : Remarks: No data available

### **methanol:**

Biodegradability : Remarks: No data available

### **propane-1,2-diol:**

Biodegradability : Remarks: No data available

### **n-butyl acetate:**

Biodegradability : Remarks: No data available

### **quartz:**

Biodegradability : Remarks: No data available

### **solvent naphtha (petroleum), light, aromatic:**

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)

#### **Molybdenum(VI) oxide:**

Bioaccumulation : Remarks: No data available

#### **mica:**

Bioaccumulation : Remarks: No data available



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### ***ethyl acetate:***

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 0.73 (20 °C)

### ***ammonium metavanadate:***

Bioaccumulation : Remarks: No data available

### ***2-butoxyethanol:***

Bioaccumulation : Remarks: No data available

Partition coefficient: noctanol/water : log Pow: 0.77 (20 °C)  
pH: 7

### ***methanol:***

Bioaccumulation : Remarks: No data available

Partition coefficient: noctanol/water : log Pow: -0.77

### ***propane-1,2-diol:***

Bioaccumulation : Remarks: No data available

### ***n-butyl acetate:***

Bioaccumulation : Remarks: No data available

### ***4-methylpentan-2-one:***

Partition coefficient: noctanol/water : Pow: 1.19

### ***quartz:***

Bioaccumulation : Remarks: No data available

### ***solvent naphtha (petroleum), light, aromatic:***

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 3.42 - 3.9

## **Mobility in soil**

### **Product:**

Distribution among environmental compartments : Remarks: No data available

### **Components:**

#### ***ethanol:***

Distribution among environmental compartments : Remarks: No data available

#### ***Molybdenum(VI) oxide:***

Distribution among environmental compartments : Remarks: No data available

#### ***mica:***

Distribution among : Remarks: No data available

# SAFETY DATA SHEET



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

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environmental compartments

**ethyl acetate:**

Distribution among : Remarks: No data available

environmental compartments

**ammonium metavanadate:**

Distribution among : Remarks: No data available

environmental compartments

**2-butoxyethanol:**

Distribution among : Remarks: No data available

environmental compartments

**methanol:**

Distribution among : Remarks: No data available

environmental compartments

**propane-1,2-diol:**

Distribution among : Remarks: No data available

environmental compartments

**n-butyl acetate:**

Distribution among : Remarks: No data available

environmental compartments

**quartz:**

Distribution among : Remarks: No data available

environmental compartments

**solvent naphtha (petroleum), light, aromatic:**

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 1993  
Proper shipping name : Flammable liquid, n.o.s.  
(ethanol, ethyl acetate)

# SAFETY DATA SHEET



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

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Class : 3  
Packing group : II  
Labels : 3  
Packing instruction (cargo aircraft) : 364  
Packing instruction (passenger aircraft) : 353  
Packing instruction (LQ) : Y341

### IMDG-Code

UN number : UN 1993  
Proper shipping name : FLAMMABLE LIQUID, N.O.S.  
(ethanol, ethyl acetate)

Class : 3  
Packing group : II  
Labels : 3  
EmS Code : F-E, S-E  
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

UN number : UN 1993  
Proper shipping name : FLAMMABLE LIQUIDS, N.O.S.  
(ethanol, ethyl acetate)

Class : 3  
Packing group : II  
Labels : 3  
ERG Code : 128  
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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ammonium metavanadate	7803-55-6	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

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

**SARA 311/312 Hazards** : Fire Hazard  
Chronic Health Hazard  
Acute 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.

This product contains components that are reportable under the regulation.

Methanol

Molybdenum trioxide

Vanadium compounds

Certain Glycol Ethers

## 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 does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product contains components that are reportable under the regulation.

## Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product contains components that are reportable under the regulation.

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

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

WARNING: This product contains a chemical known to the

# SAFETY DATA SHEET



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

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State of California to cause birth defects or 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) : This product contains one or several components listed in the Canadian NDSL.
- AICS (Australia) : On the inventory, or in compliance with the inventory
- NZioC (New Zealand) : On the inventory, or in compliance with the inventory
- 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) : Not 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) : Not in compliance with the inventory
- INSQ (Mexico) : Not in compliance with the inventory

## SECTION 16. OTHER INFORMATION

Revision Date : 08/18/2020

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.

US / EN