L600 Version: 2.0 US - en

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name Lumabase Yellow Iron Oxide

Product code L600

Formula date 2018-09-04

Recommended use Coating for professional use

Responsible party Pro Line Performance Products

PO Box 1136 Olympia, WA 98507

Telephone Product information www.LumabaseCoatings.com

Medical emergency 800-535-5053 Transportation emergency 800-535-5053

2. HAZARDS IDENTIFICATION

GHS-Classification

Flammable liquids, Category 2; Skin corrosion/irritation, Category 2; Serious eye damage/eye irritation, Category 1; Carcinogenicity, Category 2; Toxicity for reproduction, Category 2; Target Organ Systemic Toxicant - Single exposure, Category 3; Target Organ Systemic Toxicant - Repeated exposure, Category 2

GHS-Labelling

Hazard symbols:



Signal word: Danger

Hazard statements: Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statements: Obtain special instructions before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local regulations.

Other hazards which do not result in classification

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:

Creation date: 2019-03-06

Page 1 of 10

L600 Version: 2.0 US - en

1.3 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of synthetic resins, pigments, and solvents

Components

CAS-No.	Chemical name	Concentration
100-41-4	Ethylbenzene	2.9%
108-65-6	Propylene glycol monomethyl ether acetate	1 - 4%
108-88-3	Toluene	6%
112-07-2	Ethylene glycol monobutyl ether acetate	2%
123-86-4	Butyl acetate	37 - 48%
1330-20-7	Xylene	9%
64742-95-6	Aromatic hydrocarbon	1 - 4%
71-36-3	N-butyl alcohol	5%
78-83-1	Isobutyl alcohol	1 - 4%

Any concentration shown as a range is due to batch variation.

Non-regulated ingredients 20 - 30%

OSHA Hazardous: Yes

4. FIRST AID MEASURES

Eye contact: Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact: Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation: Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion: If swallowed, seek medical advice immediately and show this safety data sheet (SDS) or product label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation: May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. mixed with an isocyanate activator/hardener (see SDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function,

Creation date: 2019-03-06

Page 2 of 10

L600 Version: 2.0 US - en

which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion: May result in gastrointestinal distress.

Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. If this product is mixed with an isocyanate, skin contact may cause sensitization.

Indication of Immediate medical attention and special treatment needed if necessary: No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Universal aqueous film-forming foam, Carbon dioxide (CO2), Dry chemical

Extinguishing media which shall not be used for safety reasons: High volume water jet

Hazardous combustion products: CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Fire and Explosion Hazards: Flammable liquid. Vapor/air mixture will burn when an ignition source is present.

Special Protective Equipment and Fire Fighting Procedures: Full protective flameproof clothing should be worn as appropriate. Wear self-contained breathing apparatus for firefighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter public sewer systems or public waterways.

6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning up spills or leaks: Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0 -10% Ammonia, 2-5% Detergent and Water (balance) Pressure can be generated. Do not seal waste containers for 48 hours to allow CO2 to vent. After 48 hours, material may be sealed and disposed of properly. If material does not contain or is not mixed with an isocyanate activator/hardener. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Environmental precautions: Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

7. HANDLING AND STORAGE

Precautions for safe handling: Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 49 °C (120 °F). If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should

Creation date: 2019-03-06

L600 Version: 2.0 US - en

be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Advice on protection against fire and explosion: Solvent vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air and will burn when an ignition source is present. Always keep in containers of same material as the original one. Never use pressure to empty container: container is not a pressure vessel. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers: Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage: Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls and work practices: Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical name	Source Time			Note
123-86-4	Butyl acetate	ACGIH 15 mi ACGIH 8 hr OSHA 8 hr	in STEL TWA TWA	200 ppm 150 ppm 150 ppm	
1330-20-7	Xylene	ACGIH 15 mi	in STEL	150 ppm	
		ACGIH 8 hr OSHA 8 hr	TWA TWA	100 ppm 100 ppm	
108-88-3	Toluene	OSHA 10 m OSHA 8 hr	CEIL in TWA TWA	300 ppm 500 ppm 200 ppm	
71-36-3	N-butyl alcohol	ACGIH 8 hr OSHA 8 hr	TWA TWA	20 ppm 100 ppm	
100-41-4	Ethylbenzene	ACGIH 8 hr OSHA 8 hr	TWA TWA	20 ppm 100 ppm	
112-07-2	Ethylene glycol monobutyl ether acetate	ACGIH 8 hr	TWA	20 ppm	
78-83-1	Isobutyl alcohol	ACGIH 8 hr OSHA 8 hr	TWA TWA	50 ppm 100 ppm	

Glossary

CEIL Ceiling exposure limit STEL Short term exposure limit TL Threshold limits

TLV Threshold Limit Value Time weighted average TWAE Time-Weighted Average

Protective equipment: Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection: Do not breathe vapors or mists. When this product is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product is used

Creation date: 2019-03-06

L600 Version: 2.0 US - en

without isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Refer to the hardener/activator label instructions and SDS for further information. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product if mixed with isocyanate activators/hardeners.

Eye protection: Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin and body protection: Neoprene gloves and coveralls are recommended.

Hygiene measures: Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners

Environmental exposure controls: Do not let product enter drains.

For ecological information, refer to Ecological Information Section 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: liquid Colour: yellow

Flash point 70 °F Lower Explosive Limit 1 % Upper Explosive Limit 7.5 % Evaporation rate Slowe

Evaporation rate

Slower than Ether

Vapor pressure of principal solvent
Water solubility
Vapor density of principal solvent (Air = 1)
Approx. Boiling Range
Approx. Freezing Range
Gallon Weight (lbs/gal)
Specific Gravity
Percent Volatile By Volume

10.5 hPa moderate
4
109 °C
-95 - 1000 °C
8.15
Specific Gravity
0.98

Specific Gravity
Percent Volatile By Volume
Percent Volatile By Weight
Percent Solids By Volume
Percent Solids By Weight
Partition coefficient: n-octanol/water
No data available

Ignition temperature 272 °C DIN 51794

Decomposition temperature Not applicable.

Viscosity (23 °C) Not applicable. ISO 2431-1993

VOC* less exempt (lbs/gal) 6.2 VOC* as packaged (lbs/gal) 6.2

10. STABILITY AND REACTIVITY

Stability: Stable

Creation date: 2019-03-06 Page 5 of 10

^{*} VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

L600 Version: 2.0 US - en

Conditions to avoid: Stable under recommended storage and handling conditions (see section 7).

Materials to avoid: None reasonably foreseeable.

Hazardous decomposition products: The product contains ingredients which, under certain conditions, also may release formaldehyde. If necessary, the precise concentration has to be determined. When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization: Will not occur.

Sensitivity to Static Discharge: Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact: None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation: May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. mixed with an isocyanate activator/hardener (see SDS for the activator), the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion: May result in gastrointestinal distress.

Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Acute oral toxicity

not hazardous

Acute dermal toxicity

not hazardous

Acute inhalation toxicity

not hazardous

% of unknown composition: 1.3 %

Skin corrosion/irritation

Butyl acetate	Category 3
Xylene	Category 2
Toluene	Category 2
N-butyl alcohol	Category 2
Ethylbenzene	Category 2
Aromatic hydrocarbon	Category 3
Isobutyl alcohol	Category 2
Propylene glycol monomethyl ether acetate	Category 3

Creation date: 2019-03-06

Page 6 of 10

L600 Version: 2.0 US - en

Serious eye damage/eye irritation

Xylene Category 2A
N-butyl alcohol Category 1
Isobutyl alcohol Category 1
Propylene glycol monomethyl ether acetate Category 2B

Respiratory sensitisation

Not classified according to GHS criteria

Skin sensitisation

Not classified according to GHS criteria

Germ cell mutagenicity

Not classified according to GHS criteria

Carcinogenicity

Ethylbenzene Category 2

Toxicity for reproduction

Toluene Category 2

Target Organ Systemic Toxicant - Single exposure

Inhalation

Narcotic effects N-butyl alcohol Respiratory system N-butyl alcohol

Target Organ Systemic Toxicant - Repeated exposure

No data available.

Aspiration toxicity

Not classified according to GHS criteria

Numerical measures of toxicity (acute toxicity estimation (ATE), etc.): No information available.

Symptoms related to the physical, chemical and toxicological characteristics:

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Through skin resorbtion, solvents can cause some of the effects described here. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Whether the hazardous chemical is listed by NTP, IARC or OSHA:

Ethylbenzene IARC 2B

12. ECOLOGICAL INFORMATION

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

Creation date: 2019-03-06

Page 7 of 10

L600 Version: 2.0 US - en

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed

14. TRANSPORT INFORMATION

International transport regulations

IMDG (Sea transport)

UN number: 1263 Proper shipping name: **PAINT**

Hazard Class:

Subsidiary Hazard Class: Not applicable.

Packing group: II Marine Pollutant: no EmS: F-E,S-E

ICAO/IATA (Air transport)

UN number: 1263 Proper shipping name: **PAINT**

Hazard Class:

Subsidiary Hazard Class: Not applicable.

Packing group:

DOT

UN number: 1263 Proper shipping name: **PAINT**

Hazard Class: 3

Subsidiary Hazard Class: Not applicable.

Packing group: II Marine Pollutant: no

The transport information is for bulk shipments. Exceptions may apply for smaller containers.

Matters needing attention for transportation: Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. REGULATORY INFORMATION

Creation date: 2019-03-06

Page 8 of 10

Version: 2.0 L600 US - en

TSCA Status: In compliance with TSCA Inventory requirements for commercial purposes.

DSL Status: Product is not DSL listed because one or more ingredients are not on the DSL inventory.

Photochemical Reactivity: Photochemically reactive

Regulatory information:

				— E	PCRA		CERCLA	CAA
CAS #	Ingredient	302	TPQ	RQ	311/312	313	RQ(lbs)	HAP
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NR	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
108-88-3	Toluene	N	NR	NR	A,C,F	Y	1,000	Y
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	1,000	Y
112-07-2	Ethylene glycol	N	NR	NR	A,C,F	Y	NR	Y
	monobutyl ether ac-							
	etate							
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N
78-83-1	Isobutyl alcohol	N	NR	NR	A,C,F	N	NR	N
108-65-6	Propylene glycol	N	NR	NR	F	N	NR	N
	monomethyl ether							
	acetate							

16. OTHER INFORMATION

HMIS rating: H: 2 ; F: 3 ; R: 0

Glossary of Terms

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

EPCRA	Emergency Planning and C SARA)	ommunity Right-to-know Act (aka Title III,		
302	Extremely hazardous substances			
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard	A = Acute Hazard C = Chronic Hazard		
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.			
CERCLA	Comprehensive Emergency I 1980.	Response, Compensation and Liability Act of		

Creation date: 2019-03-06

Page 9 of 10

L600	Version: 2.0	US - en

HAP Listed as a Clean Air Act Hazardous Air Pollutant.

TPQ Threshold Planning Quantity.

Reportable Quantity RQ ΝÄ not available

not regulated

NOTE: The list (above) of glossary terms may be modified.

Information is accurate and subject to change as new information is received.

The information on this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

SDS Prepared by Regulatory Affairs

Report version

Version: 2.0 Changes:

Revision Date: 2019-03-05

Creation date: 2019-03-06

Page 10 of 10