

Product Name: PYROMARK SERIES
Grade: 2500 FLAT BLACK PAINT
Product Description: Heat Resistant Paint
Revision Date: July 12, 2013

1. Product and Company Description

LA-CO Industries

1201 Pratt Blvd.
Elk Grove Village, IL 60007
(847)956-7600

For Emergency Phone Number:
800-424-9300 CHEMTREC (USA)
FAX: 908-757-9273
INTERNATIONAL: (703) 527-3887 CHEMTREC

Chemical Name or Synonym: Not applicable

Generic name or family: Heat Resistant Paint

Application of the substance / preparation: Painting of substrates with high temp operating conditions

2. Chemical Composition

Component	Symbol	Risk Phrases	CAS #	EC #	%
Stoddard Solvent	Xn; Carc Cat 2	R45, R65	8052-41-3	232-41-3	8-12
Aromatic Naphtha Solvent	Xn	R65,	64742-94-5	265-198-5	1-5
Aromatic Naphtha Solvent	NA	NA	64742-95-6	NA	20-25
Xylene	F, Xn	R10, R20/21, R38	1330-20-7	215-535-7	18-22
Toluene	F, Xn, Xi Repr.Cat 3	R11, R48/20-65, R38, R67	108-88-3	202-849-4	1-5
Benzene	F, Carc Cat 1 Muta Cat 2 Xn, Xi	R11, R45, R46, R36/38, R65 R48/23/24/25	71-43-2	200-753-7	0.01-0.32
Black Pigment	NA	NA	68186-94-7	269-056-3	18-22
Non-Hazardous Ingredients	None	None	None	None	20-25

Xylene

CAS#: 1330-20-7

Molecular Formula: C₈H₁₁

Synonyms: Dimethyl benzene

Toluene**CAS#: 108-88-3****Molecular Formula: C₇H₈****Synonyms: Toluol****Benzene****CAS#: 71-43-2****Molecular formula: C₆H₆****Synonyms: Benzol****Aromatic Naphtha Solvent****CAS#: 64742-94-5****Molecular Formula: Not available****Synonyms: Solvent Naphtha (petroleum) Heavy Aromatic****Black Pigment****CAS#: 68186-94-7****Molecular formula: Not available****Synonyms: Manganese ferrite black spinel****3. Hazards Identification****A. Emergency Overview:****Information Pertaining To Particular Dangers for Man and Environment:**

Classification: This preparation contains substances defined as hazardous according to the latest adaptations of European Union Directives 67/548/EEC and 1999/45/EC.

Physical Appearance:

Liquid Paint

B. Potential Health Effects:**Acute Eye:**

May cause irritation

Acute Skin:

May cause irritation, redness

Acute Inhalation:

May cause headache, drowsiness, dizziness, loss of coordination, nausea
Repeated and prolonged occupational over to solvents may cause brain and nervous system damage.

Acute ingestion:

Not considered a route of exposure under anticipated use conditions. May cause severe irritation to the digestive tract if ingested.

Medical Conditions Generally Aggravated by Exposure:

Respiratory symptoms associated with pre-existing lung disorders may be aggravated by exposure to this material.

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Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with brain and nervous system damage.

4. First Aid Measures**First Aid Measures for Accidental:****Eye Exposure:**

Flush eyes with water for 15 minutes. If pain or irritation persists, obtain medical attention.

Skin Exposure:

Wash with soap and water. If pain or irritation persists, obtain medical attention.

Inhalation:

Move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion:

Do not induce vomiting. Obtain immediate medical attention.

5. Fire Fighting Measures**Fire Hazard Data:**

Autoignition: Not available

Flash Point: 31° C. (88° F)

Flammability Limits (vol/vol %):

Lower:
0.5

Upper:
6.0

Extinguishing Media:

Dry chemical, CO₂, or universal type foam.

Special Fire Fighting Procedures:

Fire-fighters who may be exposed to the products of combustion should be equipped with EN or NIOSH approved positive pressure-self contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards:

This material is flammable and may be ignited by heat, sparks, flame or static electricity. Closed container may explode in the heat of a fire.

6. Accidental Release Measures**Cleanup and Disposal of Spill:**

Pick up spill using absorbent material and hold in container for disposal. Discard any product, residue, disposable container or liner in full compliance with Federal, State, and local regulations.

7. Handling and Storage

Handling/Storage:

Avoid contact with skin, eyes and clothing. Keep in a tightly closed container, stored in a cool, dry, well ventilated area. Store away from possible sources of ignition. Containers should be suitably earthed to prevent static charge formation.

8. Exposure Controls / Personal Protection

Exposure Guidelines:

HAZARDOUS COMPONENT OF MIXTURE	OSHA	ACGIH TLV
Stoddard Solvent	100PPM	100PPM
Aromatic Naphtha Solvent	N.A.	N.A.
Aromatic Naphtha Solvent	N.A.	N.A.
Xylene	100PPM	100PPM
Toluene	100PPM	100PPM
Benzene	1 ppm	0.5ppm
Black Pigment	15mg/m ³	N.A.

Exposure limits

Xylene

Austria	50 ppm MAK; 221 mg/m ³ MAK (all isomers)
Belgium	50 ppm TWA; 221 mg/m ³ TWA
Bulgaria	221.0 mg/m ³ TWA
Cyprus	50 ppm TWA; 221 mg/m ³ TWA
Czech Republic	200 mg/m ³ TWA
Denmark	25 ppm TWA; 109 mg/m ³ TWA
Estonia	50 ppm TWA; 200 mg/m ³ TWA
Finland	50 ppm TWA; 220 mg/m ³ TWA
France	50 ppm VME; 221 mg/m ³ VME
Germany	100 ppm TWA (exposure factor 2); 440 mg/m ³ TWA (exposure factor 2)
Greece	100 ppm TWA; 435 mg/m ³ TWA
Hungary	221 mg/m ³ TWA
Ireland	50 ppm TWA; 221 mg/m ³ TWA
Italy	50 ppm TWA; 221 mg/m ³ TWA
Latvia	50 ppm TWA; 221 mg/m ³ TWA
Luxembourg	50 ppm TWA; 221 mg/m ³ TWA
Malta	50 ppm TWA; 221 mg/m ³ TWA
Netherlands	50 ppm MAC; 210 mg/m ³ MAC
Romania	50 ppm TWA; 221 mg/m ³ TWA
Slovak Republic	50 ppm TWA; 221 mg/m ³ TWA
Slovenia	50 ppm TWA; 221 mg/m ³ TWA
Spain	50 ppm VLA-ED; 221 mg/m ³ VLA-ED

United Kingdom	50 ppm TWA; 220 mg/m3 TWA
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Benzene

Croatia	5 ppm MAC; 15 mg/m3 MAC, Skin Notation
Iceland	1 ppm Ceiling; 3.2 mg/m3 Ceiling, 0.5 ppm TWA; 1.6 mg/m3 TWA
Norway	3 ppm STEL; 6 mg/m3 STEL, 1 ppm TWA; 3 mg/m3 TWA
Switzerland	0.5 ppm MAK; 1.6 mg/m3 MAK
EU	1 ppm TWA; 3.25 mg/m3 TWA
Austria	1 ppm TRK; 3.2 mg/m3 TRK
Belgium	1 ppm TWA; 3.25 mg/m3 TWA
Bulgaria	3.25 mg/m3 TWA
Cyprus	1 ppm TWA; 3.25 mg/m3 TWA
Czech	10 mg/m3 Ceiling, 3 mg/m3 TWA
Denmark	0.5 ppm TWA; 1.6 mg/m3 TWA
Estonia	3 ppm STEL; 9 mg/m3 STEL, 0.5 ppm TWA; 1.5 mg/m3 TWA
Finland	1 ppm TWA (all industries); 3.25 mg/m3 TWA (all industries)
France	1 ppm VME (restrictive limit); 3.25 mg/m3 VME (restrictive limit)
Greece	1.0 ppm TWA; 3.19 mg/m3 TWA
Hungary	3 mg/m3 Ceiling
Ireland	1 ppm TWA; 3 mg/m3 TWA
Italy	1 ppm TWA; 3.25 mg/m3 TWA
Latvia	1 ppm TWA; 3.25 mg/m3 TWA
Lithuania	6 ppm TPRV; 19 mg/m3 TPRV, 1 ppm IPRV; 3.25 mg/m3 IPRV
Luxembourg	1 ppm TWA; 3.25 mg/m3 TWA
Netherlands	3.25 mg/m3 TWA
Poland	TWAs - 1.6 mg/m3 NDS
Portugal	.5 ppm STEL, 0.5 ppm TWA
Romania	Car1 ppm TWA; 3.25 mg/m3 TWA
Slovak Republic	5.0 ppm STEL; 16.25 mg/m3 STEL, 1.0 ppm TWA; 3.25 mg/m3 TWA
Slovenia	4 ppm STEL; 13 mg/m3 STEL, 1 ppm TWA; 3.25 mg/m3 TWA
Spain	1 ppm VLA-ED; 3.25 mg/m3 VLA-ED
Sweden	3 ppm STV; 9 mg/m3 STV, 0.5 ppm LLV; 1.5 mg/m3 LLV
United Kingdom	3 ppm STEL, WELs -1 ppm TWA

Toluene

Croatia	100 ppm MAC; 380 mg/m3 MAC, 150 ppm STEL; 560 mg/m3 STEL
Iceland	50 ppm Ceiling; 188 mg/m3 Ceiling, 25 ppm TWA; 94 mg/m3 TWA
Norway	37.5 ppm STEL; 141 mg/m3 STEL, 25 ppm TWA; 94 mg/m3 TWA
Switzerland	50 ppm MAK; 190 mg/m3 MAK, 200 ppm STEL; 760 mg/m3 STEL
EU	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 192 mg/m3 TWA
Austria	50 ppm MAK; 190 mg/m3 MAK, 100 ppm STEL (4 X 15 min); 380 mg/m3 STEL (4 X 15 min)
Belgium	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 192 mg/m3 TWA
Bulgaria	300.0 mg/m3 STEL, 150.0 mg/m3 TWA

Cyprus	100 pm STEL; 384 mg/m3 STEL, 50 ppm TWA; 192 mg/m3 TWA
Czech Republic	500 mg/m3 Ceiling, 200 mg/m3 TWA
Denmark	25 ppm TWA; 94 mg/m3 TWA
Estonia	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 200 mg/m3 TWA
Finland	100 ppm STEL; 380 mg/m3 STEL, 50 ppm TWA; 190 mg/m3 TWA
France	100 ppm VLCT (restrictive limit); 384 mg/m3 VLCT (restrictive limit), 50 ppm VME (restrictive limit); 192 mg/m3 VME (restrictive limit)
Germany	50 ppm TWA (exposure factor 4); 190 mg/m3 TWA (exposure factor 4)
Greece	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 192 mg/m3 TWA
Hungary	380 mg/m3 STEL, 190 mg/m3 TWA
Ireland	100 ppm STEL; 560 mg/m3 STEL, 50 ppm TWA; 188 mg/m3 TWA
Latvia	40 ppm STEL; 150 mg/m3 STEL, 14 ppm TWA; 50 mg/m3 TWA
Lithuania	100 ppm TPRV; 400 mg/m3 TPRV, 50 ppm IPRV; 200 mg/m3 IPRV
Malta	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 192 mg/m3 TWA
Netherlands	384 mg/m3 STEL, 150 mg/m3 TWA
Poland	200 mg/m3 NDSCh, 100 mg/m3 NDS
Portugal	50 ppm TWA
Romania	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 100 mg/m3 TWA
Slovak Republic	384 mg/m3 Ceiling, 50 ppm TWA; 192 mg/m3 TWA
Slovenia	200 ppm STEL; 760 mg/m3 STEL, 50 ppm TWA; 190 mg/m3 TWA
Spain	100 ppm VLA-EC (indicative limit value); 384 mg/m3 VLA-EC (indicative limit value), 50 ppm VLA-ED (indicative limit value); 192 mg/m3 VLA-ED (indicative limit value)
Sweden	100 ppm STV; 400 mg/m3 STV, 50 ppm LLV; 200 mg/m3 LLV
United Kingdom	100 ppm STEL; 384 mg/m3 STEL, 50 ppm TWA; 191 mg/m3 TWA

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

Use Organic vapor respirator. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or EN approved respirator when necessary.

Eye / Face Protection:

If eye contact while using product may be anticipated, wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Skin Protection:

Wear chemical resistant gloves impermeable to paint (such as latex or neoprene) and protective clothing to minimize skin contact. Observe good personal hygienic practices to avoid product contact. Wash hands after use of this product.

9. Physical and Chemical Properties

Physical State: Liquid Paint
Odor: Aromatic Naphtha odor
pH: Not determined
Specific Gravity (Water = 1): 1.15
Water Solubility: Negligible

Melting Point: Not applicable
Freezing Point: Not determined
Boiling Point: 110 - 193°C (230-380°F)
Vapor Pressure: 2.5 mmHg
Vapor Density (Air=1): 3.8
Percent Volatiles by Volume: 50 % Approx
Evaporation rate (N-Butyl Acetate = 1): 0.25
Viscosity: Not determined
Molecular Weight: not applicable
Volatile Organic Compounds (VOC): Typically 624 gms/ltr or 5.2 lbs/gal

10. Stability and Reactivity

Chemical Stability:

Stable

Conditions to Avoid:

Not available

Materials / Chemicals to Be Avoided:

Not available

Hazardous Decomposition Products:

If heated to decomposition may emit carbon dioxide, carbon monoxide or other toxic compounds.

Hazardous Polymerization:

Will not occur

11. Toxicological Information

Carcinogenicity:

Stoddard solvent used in this formulation Carc Cat 2 Substance

Toluene used in the formulation is Repr. Cat 3 Substance

Benzene used in this formulation is Carc Cat 1, and Muta Cat 2 Substance

Toxicity data for:**Aromatic Solvent Naphtha (CAS# 64742-94-5):** LD50 Oral Rat 7050 mg/kg bw, LC50 Inhalation Rat 6hrs >11.4 mg/liter, LD50 Dermal Rabbit > 3160 mg/kg bw.**Xylene** Oral LD50 rat 4300 mg/kg bw, Inhalation LC50 rat 6350 ppm 4 hrs, Dermal LD50 rabbit > 4350 mg/kg bw.**Toluene:** LC50 Oral Rat- 636 mg/kg bw; LC50 Inhalation Rat 1 Hr- 26700 ppm**Benzene:** LD50 Oral Rat 930 mg/kg bw, LC50 Inhalation Rat 7hrs 10000 ppm, LD50 dermal Rabbit > 9400 mg/kg bw.

12. Ecological Information

Ecotoxicological Information:

Not Determined

13. Disposal Considerations

Waste Disposal Method:

Discard any product, residue, disposable container or liner in full compliance with national regulations.

Container Handling and Disposal:

Dispose of container and unused contents in accordance with national regulations.

14. Transportation Information

Shipping Name:

ADR/RID/IMO/ICAO /US DOT	Proper Shipping Name	Paint – Flammable liquid
	Hazard Class	UN 1263
	ID Number	
	Packaging Group	III

15. Regulatory Information

U.S. Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard: Yes
 Reactive Hazard: No
 Release of Pressure: No
 Acute Health Hazard: Yes
 Chronic Health Hazard: Yes

TSCA

All components of this product are on the TSCA inventory or are not required to be listed.

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemical (s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of CFR 372:

Chemical Name	%	CAS Number
Xylene	18-22	1330-20-7
Toluene	1-5	108-88-3
Benzene	.01-0.32	71-43-2
Manganese Compound (in pigment)	8-10	7439-96-5
Copper Compound (in pigment)	4-6	7440-50-8

Other Regulations:

U.S. State

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Prop 65
Benzene, Toluene

European/International Regulations

EU Marking and Labeling

Symbol:



F: Highly flammable



Xn : Harmful

Risk Phrases:
R11, R36, R66, R67

Safety Phrases:
S2, S16, S26, S29, S33

Inventory Information

EU The substances in this preparation have been checked against the European Inventory of Existing Commercial Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), and the No Longer Polymer (NLP) list. Substances not identified on these inventories are exempt.

16. Other Information

National Paint & Coating Hazardous Materials Identification System – HMIS(R):

Health Hazard: 2
Flammability: 3
Reactivity: 0

Text of R-Phrases in Section 2

R10: Flammable
R11: Highly flammable
R20/21: Harmful by inhalation and in contact with skin
R36/38: Irritating to eyes and skin
R38: Irritant to skin
R45: May cause cancer
R46: May cause heritable genetic damage
R48/20: Harmful: Danger of serious damage to health by prolonged exposure through inhalation

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R48/23/24/25: Toxic: Danger of serious damage to health by prolonged exposure through inhalation contact with skin and if swallowed.
R65: Harmful, may cause lung damage if swallowed
R67: Vapors may cause drowsiness and dizziness

Text of S-Phrases

S2: Keep out of reach of children
S16: Keep away from source of ignition, No smoking.
S24/25: Avoid contact with skin, eyes
S29: Do not empty in to drains
S36/37: Wear suitable protective clothing and gloves
S45: In case of accident or if you feel unwell, seek medical advice immediately.
S53: Avoid exposure – obtain special instructions before use

Key Legend Information:

N/A – Not Applicable
ND – Not Determined
ACGIH – American Conference of
Governmental Industrial Hygienists
OSHA – Occupational Safety and Health
Administration
TLV – Threshold Limit Value

PEL – Permissible Exposure Limit
TWA – Time Weighted Average
STEL – Short Term Exposure Limit
NTP – National Toxicology Program
IARC – International Agency for Research on
Cancer
RTECS - Registry of Toxic Effects of Chemical
Substances

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