Safety Data Sheet
USFS Tree Mark Paint

SDS Revision Date: **12/09/2014**

LIGHTHOUSE for the BLIND
ST. LOUIS, MO.

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity	USFS Tree Mark Paint
Alternate Names	Specification: 2400-400b, Type A, Orange EF LHB Part No/Pkg: 00R4-320/Quarts, 00R4-321/Gallons National Stock No.: 8010-01-441-6078, 8010-01-441-6079 CAGE Code: 0FTT5 Contract Number: AG-3187-C-09-0026

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	See product label.
Application Method	See product label.

1.3. Details of the supplier of the safety data sheet

Company Name	LHB Industries 8833 Fleischer Place Berkeley, MO 63134
Emergency	
24 hour Emergency Telephone No.	(800) 633-8253 (PERS)
Customer Service: LHB Industries	(314) 423-4333

2. Hazard identification of the product

2.1. Classification of the substance or mixture

STOT RE 2;H373	May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (central nervous system)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Warning

H373 May cause damage to organs through prolonged or repeated exposure.

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

[Prevention]:

P260 Do not breathe mist / vapors / spray.
P262 Do not get in eyes, on skin, or on clothing.
[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
P314 Get Medical advice / attention if you feel unwell.
P331 Do NOT induce vomiting.
[Storage]:
No GHS storage statements
[Disposal]:
No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Propylene Glycol **CAS Number: 0000057-55-6**	**25 - 50**	**Not Classifed**	**[1]**
Stoddard solvent **CAS Number: 0008052-41-3**	**1.0 - 10**	**STOT RE 1;H372** **Asp. Tox. 1;H304**	**[1][2]**
Titanium dioxide **CAS Number: 0013463-67-7**	**1.0 - 10**	**Not Classified**	**[1][2]**
Cobalt neodecanoate **CAS Number: 0027253-31-2**	**0.10 - 1.0**	**Acute Tox. 4;H302,** **Skin Sens. 1;H317,** **Flam. Liq. 3;H226,** **Aquatic Chronic 3;H412** **Repr. 2;H361**	**[1]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview

INHALATION: May be irritating to upper respiratory tract.
SKIN: Low potential of causing irritation following exposure. Not absorbed topically. Some reddening of the skin may occur with lengthy exposure.
EYE CONTACT: May cause mild irritation.
INGESTION: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of ingestion. Large amounts may cause gastric disturbances. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO_2, powder, water spray.
Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of carbon and sulfur, formaldehyde gas and thiols.

Do not breathe mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. ----

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store this product below 120°F, in a cool, dry, well ventilated area away from heat, sparks, flame, oxidizers and out of direct sunlight.

Incompatible materials: Strong oxidizers and alkali metals.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000057-55-6	Propylene Glycol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	10 mg/m3 TWA (listed as AIHA WEEL)
0008052-41-3	Stoddard solvent	OSHA	TWA 500 ppm (2900 mg/m3)
		ACGIH	TWA: 290 mg/m3STEL: 580 mg/m3
		NIOSH	TWA 350 mg/m3 C 1800 mg/m3 [15-minute]
		Supplier	No Established Limit
0013463-67-7	Titanium dioxide	OSHA	TWA 15 mg/m3
		ACGIH	TWA: 10 mg/m32B, Revised 2006,
		NIOSH	Footnote ca
		Supplier	No Established Limit
0027253-31-2	Cobalt neodecanoate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000057-55-6	Propylene Glycol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0008052-41-3	Stoddard solvent	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0013463-67-7	Titanium dioxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0027253-31-2	Cobalt neodecanoate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.
Skin	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Orange Liquid
Odor	Solvent Odor
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	316-370 F
Flash Point	205 F (96 C) SETAFLASH
Evaporation rate (Ether = 1)	Slower than ether
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** 1.0 **Upper Explosive Limit:** 17.4
Vapor pressure (Pa)	Not Measured
Vapor Density	Heavier than Air
Specific Gravity	1.07
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

VOC Content	5.52 lbs/gal
Maximum Incremental Reactivity	Not Measured
HAPS (lbs/gal)	0.0
HAPS (lbs/gal of Solids)	0.0
HAPS (lbs/lb of Solids)	0.0
% Volatile (by volume)	Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Temperatures above 160 C

10.5. Incompatible materials

Strong oxidizers and alkali metals.

10.6. Hazardous decomposition products

Oxides of carbon and sulfur, formaldehyde gas and thiols.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Propylene Glycol - (57-55-6)	20,000.00, Rat - Category: NA	20,800.00, Rabbit - Category: NA	105.00, Rat - Category: NA	No data available	No data available
Stoddard solvent - (8052-41-3)	No data available	No data available	No data available	No data available	No data available
Titanium dioxide - (13463-67-7)	10,000.00, Rat - Category: NA	10,000.00, Rabbit - Category: NA	No data available	6.82, Rat - Category: NA	No data available
Cobalt neodecanoate - (27253-31-2)	900.00, Rat - Category: 4	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Propylene Glycol - (57-55-6)	710.00, Pimephales promelas	10,000.00, Daphnia magna	Not Available
Stoddard solvent - (8052-41-3)	Not Available	Not Available	Not Available
Titanium dioxide - (13463-67-7)	1,000.00, Fundulus heteroclitus	5.50, Daphnia magna	5.83 (72 hr), Pseudokirchneriella subcapitata
Cobalt neodecanoate - (27253-31-2)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	**DOT Hazard Class:** Not Applicable **DOT Label:** None	**IMDG:** Not Applicable **Sub Class:** Not Applicable	**Air Class:** Not Applicable

14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2B

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs:
(No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous :
(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

Cobalt neodecanoate

Proposition 65 - Carcinogens (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):
(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Propylene Glycol

Stoddard solvent

Titanium dioxide

Penn RTK Substances (>1%):

Propylene Glycol

Stoddard solvent

Titanium dioxide

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Document