

Safety Data Sheet



according to OSHA Hazard Communication
29 CFR Part 1910.1200

according to Regulation (EC)
No. 1907/2006 Article 31

Section 1. Identification

Product Code: EF720010

Product Name: SB YEL HI VOC ALBERTA 2016

Product Type: SB Paint

Recommended Use: Traffic Markings

Supplied by: Ennis-Flint
A Traffic Safety Solutions Company
115 Todd Court
Thomasville, NC 27360
T: 800.331.8118 (For Technical Inquiries)

Emergency Telephone: Chemtrec 1-800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: Extremely Flammable! This product contains a component suspected of causing cancer. However, it is in a non-respirable form and inhalation is unlikely to occur from exposure. This classification is relevant when exposed to dust or powder form only (e.g. sanding, grinding). May cause fire. In use, may form flammable/explosive vapour-air mixture.

Classification

Symbol(s) of Product



Signal Word

Danger

GHS Named Chemicals On Label

Ethylbenzene, Toluene, Light naphtha-hydrotreated, Methanol

GHS HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Aspiration Hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin Irritation, category 2	H315	Causes skin irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects. Classification as mutagenic category 1, if one of the ingredients is contained in an amount of at least 0.1 % . Applicable to liquids, solids (in w / w) and gases (v / v) . The fabric can also have their own exposure limit . Routes of exposure depend on the form of the ingredient.

Carcinogenicity, category 1A	H350	May cause cancer. Classified as carcinogenic Category 1 on the basis of epidemiological and/or animal data. Mixtures are classified as carcinogenic when at least 1 ingredient has been classified as carcinogenic and is present at 0.1% or above. Routes of exposure are dependant on ingredient form.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child. Classified Category 2 suspected human reproductive toxicant irreversible effects such as structural malfunctions, embryo/foetal lethality, post natal functional deficiencies.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Section 3. Composition/Information on ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Toluene	108-88-3	10-25	GHS02-GHS07-GHS08	H225-304-315-332-336-361-373
Ethylbenzene	100-41-4	2.5-10	GHS02	H225
Light naptha-hydrotreated	64742-49-0	2.5-10	GHS08	H304-340-350
Titanium Dioxide	13463-67-7	1.0-2.5	GHS08	H351
Crystalline Silica, Quartz	14808-60-7	0.1-1.0	GHS08	H351-373
Methyl Ethyl Ketoxime	96-29-7	0.1-1.0	GHS05-GHS07-GHS08	H302-317-318-351
Methanol	67-56-1	< 5.0	GHS02-GHS06-GHS08	H225-302-319-330-370

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>EINECS No.</u>	<u>REACH Reg No.</u>	<u>M-Factors</u>
Toluene	108-88-3	203-625-9	not available	0
Ethylbenzene	100-41-4	202-849-4	not available	0
Light naptha-hydrotreated	64742-49-0	265-151-9	not available	0
Titanium Dioxide	13463-67-7	236-675-5	not available	0
Crystalline Silica, Quartz	14808-60-7	238-878-4	not available	0
Methyl Ethyl Ketoxime	96-29-7	202-496-6	not available	0
Methanol	67-56-1	200-659-6	01-2119433307-44-XXXX	0

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air. Give oxygen or artificial respiration if needed. Consult a physician if symptoms persist.

FIRST AID - SKIN CONTACT: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a

physician if symptoms persist.

FIRST AID - INGESTION: Call a physician or Poison Control Center immediately. Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material may polymerize explosively when involved in a fire. Runoff to sewer may create fire or explosion hazard. Flammable liquid. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors can spread along ground and collect in low or confined areas (sewers, basements, tanks). Water spray may reduce vapor, but may not prevent ignition in closed spaces.

SPECIAL FIREFIGHTING PROCEDURES: Flammable. Cool fire-exposed containers using water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

Section 6. Accidental release measures

ENVIRONMENTAL PRECAUTIONS: Prevent entry into waterways, sewers, basements or confined areas. Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use personal protective equipment. Ensure adequate ventilation. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically. Keep in suitable and closed containers for disposal. Use clean non-sparking tools to collect absorbed material.

Section 7. Handling and storage



HANDLING: Flammable liquid. Avoid heat, sparks and open flames. Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use only in an area containing flame proof equipment.

STORAGE: Keep containers tightly closed in a cool, well-ventilated place. Store away from heat and sources of ignition. Keep in properly labeled containers.

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Toluene	20 PPM		200 PPM	300 PPM
Ethylbenzene	100 PPM	125 ppm	100 PPM	
Light naptha-hydrotreated				
Titanium Dioxide	10 mg/m3		15 mg/m3	
Crystalline Silica, Quartz	0.025 mg/m3		0.05 mg/m3	
Methyl Ethyl Ketoxime				
Methanol	200 PPM	250 PPM	200 PPM	

<u>Name</u>	<u>Percentage</u>	<u>VME mg/m3</u>	<u>VME ppm</u>	<u>OEL Nota</u>
Toluene	10-25	191	50	50 PPM
Ethylbenzene	2.5-10	441	100	100 ppm
Titanium Dioxide	1.0-2.5	10	0	15 mg/m3
Methanol	< 1.0	266	200	200 PPM

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.



SKIN PROTECTION: Protective gloves/clothing.



EYE PROTECTION: Tightly fitting safety goggles.



OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems. Ventilation system should be explosion proof.



HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and chemical properties

Appearance:	Yellow	Physical State:	Liquid
Odor:	Aromatic solvent/toluene	Odor Threshold:	Not Established
Density, g/cm3:	1.472	pH:	No Information
Freeze Point, °C:	NI	Viscosity:	NI
Solubility in Water:	Insoluble	Partition Coefficient, n-octanol/water:	NI
Decomposition Temp., °C:	NI		
Boiling Point, °C:	N.I.	Explosive Limits, vol%:	N.I.
Combustibility:	Supports Combustion	Flash Point, °C:	-10
Evaporation Rate:	Slower than Diethyl Ether	Auto-ignition Temp., °C:	NI
Vapor Density:	Heavier than air	Vapor Pressure:	NI

(See "Other information" Section for abbreviation legend)

Section 10. Stability and reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Dust formation. Heat, flames and sparks.

INCOMPATIBILITY: Strong acids. Chlorinated compounds. Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Hydrocarbons. Carbon dioxide.

HAZARDOUS POLYMERIZATION: Hazardous polymerization does not occur.

Section 11. Toxicological information



Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss of consciousness. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Sanding and grinding dust may be harmful if inhaled.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Irritating to skin. Repeated exposure may cause skin dryness or cracking.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Irritating to eyes.

EFFECT OF OVEREXPOSURE - INGESTION: May be harmful if swallowed. Ingestion may cause irritation to mucous membranes. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration into lungs may cause pulmonary edema and chemical pneumonitis. May cause gastrointestinal disturbances with dizziness and central nervous system depression.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Exposure to toluene in animals via inhalation and intentional overexposure to toluene in humans has caused adverse fetal development effects. Recurrent overexposure may result in liver and kidney injury. Ethylbenzene has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B). Prolonged or repeated overexposure to ethylbenzene may result in adverse effects to the kidneys, liver, respiratory system, thyroid, testicles, and pituitary glands. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen. Inhalation, ingestion, or skin absorption of methanol can cause blindness.

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name according to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Gas LC50</u>
108-88-3	Toluene	>5580 mg/kg	12196 mg/kg rabbit	3316 -7642 ppm - 4 h rat
100-41-4	Ethylbenzene	>2000 mg/kg	15,433 mg/kg rabbit	>20001 ppm
64742-49-0	Light naptha-hydrotreated	>2000 mg/kg	> 2000 mg/kg	>20001 ppm
13463-67-7	Titanium Dioxide	> 10000 mg/kg rat	> 10000 mg/kg rabbit	>20001 ppm
14808-60-7	Crystalline Silica, Quartz	>2000 mg/kg	> 2000 mg/kg	>20001 ppm
96-29-7	Methyl Ethyl Ketoxime	930 mg/kg	> 2000 mg/kg	>20001 ppm
67-56-1	Methanol	1187 -2769 mg/kg rat	17100 mg/kg rabbit	128.2 PPM - 4 h rat

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated.

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

<u>CAS-No.</u>	<u>Name according to EEC</u>	<u>Bio. Conc. Factor (BCF)</u>	<u>Octanol-water par. Coeff (KOW)</u>
108-88-3	Toluene	13 - 90	2.65
100-41-4	Ethylbenzene	0.67 -15.00	3.15
64742-49-0	Light naptha-hydrotreated	not available	2.01 - 5.0
13463-67-7	Titanium Dioxide	not available	not available
14808-60-7	Crystalline Silica, Quartz	not available	not available
96-29-7	Methyl Ethyl Ketoxime	0.5 - 5.8	not available
67-56-1	Methanol	1	-0.77

Section 13. Disposal considerations



Product

DISPOSAL METHOD: This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not re-use empty containers. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

European Waste Code: 080111 waste paint/var.w.org.solv/DS

Uncleaned Packaging

European Waste Code: 150110 packaging dangerous residuals

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Road Transport

UN Number:	UN1263
ADR/RID Class:	3
Packing Group:	2
Shipping Name:	Paint
Primary Shipping Hazard:	No Information
Road Tunnel Transport Code:	NI

Sea Transport

UN Number:	UN1263
IMDG/GGVSee Class:	3
EmS-No:	F-E, S-E
Packing Group:	2
Shipping Name:	Paint
Primary Shipping Hazard:	No Information
Marine Pollutant:	Not A Marine Pollutant
Shipping Hazard(Marine Pollutant):	No Information

Air Transport

UN Number:	UN1263
ICAO/IATA Class:	3
Packing Group:	2
Shipping Name:	Paint
Primary Shipping Hazard:	No Information

Section 15. Regulatory information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Toluene	108-88-3
Ethylbenzene	100-41-4
Xylene	1330-20-7
Methanol	67-56-1

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
Toluene	108-88-3
Ethylbenzene	100-41-4
Light naptha-hydrotreated	64742-49-0
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

Xylene	1330-20-7
Methyl Ethyl Ketoxime	96-29-7
Silicon dioxide, amorphous	7631-86-9
Methanol	67-56-1
Distillates (petroleum), hydrotreated light	64742-47-8
Cobalt 2-ethylhexanoate	136-52-7
Mineral Spirits (Stoddard Solvent)	8052-41-3

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS-No.</u>
Calcium Carbonate	1317-65-3
Nepheline Syenite	37244-96-5
Alkyd Resin	66070-93-7

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
Calcium Carbonate	1317-65-3
Nepheline Syenite	37244-96-5
Alkyd Resin	66070-93-7

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylbenzene	100-41-4
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
Toluene	108-88-3

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: B2, D1A, D2A, D2B

Denmark

B-Value: 0.000000

France

Storage Conditions: No Information

Professional Illness Table:

<u>CAS Number</u>	<u>Chemical Name</u>	<u>Professional Illness</u>
100-41-4	Ethylbenzene	not available
64742-49-0	Light naptha-hydrotreated	not available
13463-67-7	Titanium Dioxide	not available

14808-60-7	Crystalline Silica, Quartz	not available
96-29-7	Methyl Ethyl Ketoxime	not available
67-56-1	Methanol	not available

Germany**VbF-Class:** No Information**WGK-class:** 3

Remarks: WGK 0 = in general not a water pollutant
 WGK 1 = weak water pollutant
 WGK 2 = water pollutant
 WGK 3 = severe water pollutant

Processing restrictions:***Incident Regulation:**

No Information

Spain**Storage Conditions:** No Information**Switzerland****VOC-Value:** 23.95**United Kingdom****Storage Conditions:** No Information**Section 16. Other information, including date of preparation of the last revision**

Revision Date:	9/26/2016	Supersedes Date:	6/22/2016
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Reason for revision: Substance Chemical Name Changed**Datasheet produced by:** Regulatory Department**HMIS Ratings:**

Health:	2	Flammability:	3	Reactivity:	0	Personal Protection:	X
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NFPA Ratings:

Health:	2	Flammability:	3	Reactivity:	0	Hazards:	None
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Volatile Organic Compounds, gr/ltr: 380**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child. Classified Category 2 suspected human reproductive toxicant irreversible effects such as structural malfunctions, embryo/foetal lethality, post natal functional deficiencies.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS05



GHS06



GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.