

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Marking Ink Kleenscribe Layout Dye

PART NUMBER: #1611

GENERAL USE: Marking ink

PRODUCT DESCRIPTION: Aerosol, flammable blue liquid



MANUFACTURER'S NAME

CE Bradley Laboratories, Inc.

DATE PREPARED: July 26, 2006

SUPERSEDES: December 21, 2003

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ADDRESS (NUMBER, STREET, P.O. BOX)

P.O. Box 8238

TELEPHONE NUMBER FOR INFORMATION

(802) 257-7971

(CITY, STATE AND ZIP CODE)

N. Brattleboro, VT 05304

COUNTRY

USA

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

DISTRIBUTOR'S NAME

The L.S. Starrett Company

ADDRESS (NUMBER, STREET, P.O. BOX)

121 Crescent St.

TELEPHONE NUMBER FOR INFORMATION

(978) 249-3551

(CITY, STATE AND ZIP CODE)

Athol, MA 01331

COUNTRY

USA

EMERGENCY TELEPHONE NUMBER

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	% (by weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES Full Text Section 16
Methyl alcohol (a,b,c)	5 - 10	67-56-1	200-659-6	F, T	R-11, 23/24/25, 39
Ethanol	30 - 35	64-17-5	200-578-6	F	R-11
n - Butyl acetate (c)	20 - 25	123-86-4	204-658-1	F	R-10, 66, 67
Ethyl acetate (a,b,c)	5 - 10	141-78-6	205-500-4	F, Xi	R-11, 36, 66, 67
Nitrocellulose, colloided, granular	5 - 10	9004-70-0	603-037-01-3 *	F	R-1, 3
Isopropyl alcohol	1 - 5	67-63-0	200-661-7	F, Xi	R-11, 36, 67
Toluene (a,b,c,d,e)	1 - 5	108-88-3	203-625-9	F, Xn	R-11
Petroleum distillate, aliphatic	1 - 5	64742-89-8	265-192-2	F, Xn	R-11, 65, 66, 67
Acetone (b,c)	1 - 5	67-64-1	200-662-2	F, Xi	R-11, 36, 66, 67
PROPELLANT					
Propane / Isobutane mixture	< 30	68476-86-8	270-705-8	F+	R-12

(a,c) See Section 15

(b) Indicates that the Resource Conservation and Recovery Act (RCRA) has determined the waste for this chemical is listed as hazardous and must be handled according to regulations in 40 CFR 260-281.

(d) Indicates listing in Table Z - 2, 29 CFR 1910.1000, value shown is 8-hour Time Weighted Average. See table for acceptable ceiling concentration limits and acceptable maximum peak above the acceptable ceiling concentration.

(e) California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986, chemicals known to the state to cause cancer or reproductive toxicity. A person in the course of doing business must warn others who may consume, come into contact with, or otherwise be exposed to this chemical.

## SECTION 3 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Aerosol, blue flammable, poisonous liquid, potentially hazardous vapors. Product cannot be made non-poisonous. Can cause serious or fatal complications if swallowed. Can cause eye and skin irritation upon contact. Inhalation of vapors can cause anesthetic effect leading to death in poorly ventilated areas. Hazard symbols for this product - F+, Xn. Risk Phrases - R12, 36/37/38, 39, 67

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**SECTION 3 - HAZARDS IDENTIFICATION (CONT'D)****POTENTIAL HEALTH EFFECTS**

**INHALATION:** Vapors may cause narcosis with headache, dullness, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death. Concentrations for 10 minutes may cause dizziness. Very high concentrations (>10,000 ppm) may cause asphyxiation with rapid respiration, reduced mental alertness and muscle coordination, nausea, vomiting, prostration, unconsciousness, convulsions, coma and

**SKIN:** Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis.

**EYES:** Direct contact with concentrated vapor or liquid may cause severe irritation.

**INGESTION:** May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts aspirated into the lungs can produce severe lung injury, chemical pneumonitis, pulmonary edema or death. Contains methyl alcohol; large doses may result in red blood cell hemolysis. Methyl alcohol is a systemic poison capable of causing blindness.

CARCINOGENICITY NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

**SECTION 4 - FIRST AID MEASURES**

**INHALATION:** Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

**EYES:** Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

**INGESTION:** DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

**SECTION 5 - FIRE FIGHTING MEASURES**

**GENERAL HAZARDS:** Flammable gas. Propane / isobutane is heavier than air and may travel a considerable distance to an ignition source. Keep away from open flame and other sources of ignition. Rapid flame propagation and flashback possible. Do not allow smoking in storage areas or when handling. Containers may rupture violently from pressure when involved in a fire situation.

**EXTINGUISHING MEDIA**

Carbon dioxide, water fog, dry chemical, chemical foam

**FIRE FIGHTING PROCEDURES**

Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Fine water spray can be used to keep fire - exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Closed containers can explode due to buildup of pressure when exposed to extreme heat; do not use direct stream of water on pool fires as product may reignite on water surface. Contents under pressure. Do not use or store near heat or ignition source.

**HAZARDOUS COMBUSTION PRODUCTS**

Smoke, fumes, oxides of carbon

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** CAUTION - EXTREMELY FLAMMABLE - Evacuate and ventilate area; confine and absorb into absorbent; place material into approved containers for disposal; for spills in excess of allowable limits (RQ) notify the National Response Center (800) 424 - 8802; refer to CERCLA 40 CFR 302 and SARA Title III, Section 313 40 CFR 372 for detailed instructions concerning reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

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**SECTION 7 - HANDLING AND STORAGE**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. CAUTION - EXTREMELY FLAMMABLE - keep away from all sources of ignition. "Empty" containers may contain residue which may form explosive vapors. Do not puncture container. Do not attempt to refill container. Maintain well ventilated work areas to minimize exposure when handling this material.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Methyl alcohol (a,b,c)	--	--	--	--	200	262	250	327
Ethanol	--	--	--	--	1000	1884	--	--
n - Butyl acetate (c)	150	710	200	950	150	713	200	950
Ethyl acetate (a,b,c)	400	1400	--	--	400	1440	--	--
Nitrocellulose, colloided, granular	Not established				Not established			
Isopropyl alcohol	400	980	500	1225	400	983	500	1230
Toluene (a,b,c,d,e)	100	375	150	560	50	188	--	--
Petroleum distillate, aliphatic	100	500	--	--	--	--	--	--
Acetone (b,c)	250	590	--	--	500	1188	750	1782
PROPELLANT								
Propane / Isobutane mixture					800	1800		

(a,c) See Section 15

**PERSONAL PROTECTION:**

RESPIRATORY PROTECTION (SPECIFY TYPE): None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Neoprene gloves, butyl or nitrile rubber gloves with cuffs.

EYE PROTECTION: Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyewash station nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR aerosol, blue liquid, characteristic solvent odor	VAPOR PRESSURE approximately 100 mm Hg @ 20° C (liquid contents)
pH Not applicable	SPECIFIC GRAVITY (WATER = 1) 0.890 (liquid contents)
BOILING POINT / BOILING RANGE 133° F (56° C) (liquid contents)	SOLUBILITY IN WATER Appreciable
FLASH POINT < - 40° F (< - 40° C) TCC	VISCOSITY Like that of water
FLAMMABLE LIMITS LEL: Not established UEL: Not established	VAPOR DENSITY (AIR = 1) > 1
AUTOIGNITION TEMPERATURE Not determined	EVAPORATION RATE (n-Butyl Acetate = 1) < 1

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**SECTION 10 - STABILITY AND REACTIVITY**

STABILITY UNSTABLE: CONDITIONS TO AVOID: Extreme temperatures, open flames, sparks  
STABLE: XXX

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.

HAZARDOUS POLYMERIZATION MAY OCCUR: CONDITIONS TO AVOID: None  
WILL NOT OCCUR: XXX

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Methyl alcohol (a,b,c)	67-56-1 200-659-6	9100 mg / kg Oral - rat	145,000 ppm / 4H Inhalation - rat
Ethanol	64-17-5 200-578-6	3450 mg / kg Oral - mouse	20,000 ppm / 10H Inhalation - rat
n - Butyl acetate (c)	123-86-4 204-658-1	14,000 mg / kg Oral - rat	> 6335 ppm / 4H Inhalation - rat
Ethyl acetate (a,b,c)	141-78-6 205-500-4	6100 mg / kg Oral - rat	45,000 mg / kg / 2H
Nitrocellulose, colloided, granular	9004-70-0 603-037-01-3 *	> 5000 mg / kg Oral - rat	Not established
Isopropyl alcohol	67-63-0 200-661-7	5840 mg / kg Oral - rat	22,500 ppm / 4H Inhalation - rat
Toluene (a,b,c,d,e)	108-88-3 203-625-9	5000 mg / kg Oral - rat	7525 ppm / 4H Inhalation - mouse
Petroleum distillate, aliphatic	64742-89-8 265-192-2	Not determined	Not determined
Acetone (b,c)	67-64-1 200-662-2	9750 mg / kg Oral - rat	16,000 ppm / 4H Inhalation - rat
PROPELLANT			
Propane / Isobutane mixture	68476-86-8 270-705-8	Not determined	Not determined
(a,c) See Section 15			

**SECTION 12 - ECOLOGICAL INFORMATION**

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD: According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors or fumes in a closed disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

**SECTION 14 - TRANSPORT INFORMATION**

PROPER SHIPPING NAME: Aerosols  
DOT HAZARD CLASS / Pack Group: 2.1  
REFERENCE: 49 CFR 173.115, .306  
UN / NA IDENTIFICATION NUMBER: UN 1950  
LABEL: FLAMMABLE GAS  
HAZARD SYMBOLS: F

IATA HAZARD CLASS / Pack Group: 2.1  
IMDG HAZARD CLASS: 2.1  
RID/ADR Dangerous Goods Code: 2.1  
UN TDG Class / Pack Group: 2.1  
Hazard Identification Number (HIN): Not listed

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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**SECTION 15 - REGULATORY INFORMATION**

**TSCA (USA - Toxic Substance Control Act)**

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

**SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)**

311/312 Hazard Categories

Fire hazard, immediate health, sudden release of pressure

313 Reportable Ingredients:

(a) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**CERCLA (USA - Comprehensive Response Compensation and Liability Act)**

(c) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture = 15,000 lbs) or greater amounts, according to 40 CFR 302.

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

**CPR (Canadian Controlled Products Regulations)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification:

**IDL (Canadian Ingredient Disclosure List)**

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

**DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)**

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

**EINECS (European Inventory of Existing Commercial Chemical Substances)**

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: 1

VbK Index: B

**RISK PHRASES:**

R12 Extremely flammable.  
R36/37/38 Irritating to eyes, respiratory system and skin  
R39 Danger of very serious irreversible effects.  
R67 Vapours may cause drowsiness and dizziness.

**SYMBOL(S) REQUIRED FOR LABEL**

Flammable Harmful



**SAFETY PHRASES:**

S7 Keep container tightly closed.  
S16 Keep away from sources of ignition  
S25 Avoid contact with eyes

**SECTION 16 - OTHER INFORMATION**

**Notes & full R-Phrase text**

R1 Explosive when dry.  
R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.  
R10 Flammable.  
R11 Highly flammable.  
R12 Extremely flammable.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed  
R36/37/38 Irritating to eyes, respiratory system and skin  
R39 Danger of very serious irreversible effects.  
R65 Damaging to lungs when swallowed  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

**HMIS HAZARD RATINGS**

HEALTH	1	* = Chronic Health Hazard	2 = MODERATE
FLAMMABILITY	4	0 = INSIGNIFICANT	3 = HIGH
PHYSICAL HAZARD	0	1 = SLIGHT	4 = EXTREME
PERSONAL PROTECTIVE EQUIPMENT	B	Safety Glasses, Gloves	

**REVISION SUMMARY:**

This MSDS has been revised in the following sections: Format update

MSDS Prepared by: Chem-Tel, Inc.  
1305 N. Florida Ave.  
Tampa, Florida USA 33602 (800) 255-3924 Outside USA (813) 248-0573

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.