according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations according to Canadian Controlled Products Regulations / WHMIS Date of issue: 02/04/2015 Version: 1.0

LA-CO Industries, Inc.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

 Product form
 : Mixture

 Product name
 : Quik Stik® TWIST PAINT MARKER Black

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

Use of the substance/mixture : Marking.

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc. 1201 Pratt Boulevard Elk Grove Village, IL. 60007-5746 Phone: (847) 956-7600 Fax: (847) 956-9885 E-mail: customer_service@laco.com 1.4. Emergency telephone number

Emergency number

: 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with the Globally Harmonized Standard

 Skin Irrit. 2
 H315

 Eye Irrit. 2A
 H319

 Carc. 2
 H351

 Repr. 2
 H361

 Full text of H-phrases: see section 16

2.2 Label elements

Label Elements: applies to OSHA 29CFR1910.1200 and Canadian WHMIS.

GHS-US labelling

Hazard pictograms (GHS-US)

	\mathbf{v}
	GHS07 GHS08
Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	 H315 - Causes skin irritation H319 - Causes serious eye irritation H351 - Suspected of causing cancer H361 - Suspected of damaging fertility or the unborn child
Precautionary statements (GHS-US)	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P264 - Wash hands thoroughly after handling P280 - Wear eye protection, protective gloves, protective clothing P302+P352 - If on skin: Wash with plenty of water P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 - If exposed or concerned: Get medical advice/attention P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse P405 - Store locked up P501 - Dispose of contents/container to Dispose in a safe manner in accordance with local/national regulations
2.3. Other hazards	

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
1-butoxypropan-2-ol	(CAS No) 5131-66-8	36.46 - 37.23	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
(2-Methoxymethylethoxy)-propanol	(CAS No) 34590-94-8	9.61	Flam. Liq. 4, H227
Carbon black	(CAS No) 1333-86-4	5.97	Carc. 2, H351
N-Ethyl O/P Toluene Sulfonamides	(CAS No) 8047-99-2	4.78	Acute Tox. 3 (Dermal), H311
4-tert-butylphenol	(CAS No) 98-54-4	0.19 - 0.48	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361 STOT SE 3, H335 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).	
First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.	
4.2. Most important symptoms and effect	ts, both acute and delayed	
Symptoms/injuries	: Suspected of damaging fertility or the unborn child. Suspected of causing cancer.	
Symptoms/injuries after skin contact	: Causes skin irritation.	
Symptoms/injuries after eye contact	Causes serious eye irritation.	

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures 5.1. Extinguishing media Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Unsuitable extinguishing media : None known. 5.2. Special hazards arising from the substance or mixture : Combustible. Combustion generates : Carbon oxides (CO, CO2). Nitrogen oxides. Sulphur Fire hazard oxides. Metallic oxides. Explosion hazard : Product is not explosive. : No dangerous reactions known. Reactivity

5.3. Advice for firefighters Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses. Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective	Personal precautions, protective equipment and emergency procedures		
General measures	: Avoid contact with skin and eyes. Avoid creating or spreading dust.		
6.1.1. For non-emergency personnel Protective equipment	: Chemical goggles or safety glasses. Wear suitable protective clothing and gloves.		

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coruing	to Canadian Controlled Products Regul		
Emergency procedures		: Evacuate unnecessary personnel.	
6.1.2.	For emergency responders		
Protecti	ve equipment	: Chemical goggles or safety glasses. Wear suitable protective clothing and gloves.	
Emerge	ency procedures	: Ventilate area.	
6.2.	Environmental precautions		
void re	elease to the environment. Notify a	authorities if product enters sewers or public waters.	
6.3.	Methods and material for cont	tainment and cleaning up	
For con	tainment	: Contain and collect as any solid.	
Methods for cleaning up		: Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.	
	•		
6.4.	Reference to other sections		
6.4.		7: safe handling. Section 8: personal protective equipment.	
5.4. Section			
5.4. Section	13: disposal information. Section	age	
5.4. Section SECT 7.1.	13: disposal information. Section ION 7: Handling and stora	age	
5.4. Section SECT 7.1. Precaut	13: disposal information. Section ION 7: Handling and stora Precautions for safe handling	 : Obtain special instructions before use. Do not handle until all safety precautions have been 	
5.4. Section SECT 7.1. Precaut	13: disposal information. Section ION 7: Handling and stora Precautions for safe handling tions for safe handling e measures	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild 	
5.4. Section SECT 7.1. Precaut Hygiene	13: disposal information. Section ION 7: Handling and stora Precautions for safe handling tions for safe handling e measures	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 	
5.4. Section SECT 7.1. Precaut Hygiene 7.2. Storage	13: disposal information. Section 7 ION 7: Handling and stora Precautions for safe handling ions for safe handling e measures Conditions for safe storage, in	 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 	

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

N-Ethyl O/P Toluene Sulfonamides (8047-99-2)		
ACGIH	Not applicable	
OSHA	Not applicable	
4-tert-butylphenol (98-54-4)		
4-tert-butyiphenoi ((96-54-4)	
ACGIH	Not applicable	

OSHA	Not applicable

1-butoxypropan-2-ol (5131-6	6-8)
ACGIH	Not applicable
OSHA	Not applicable

(2-Methoxymethylethoxy)-propanol (34590-94-8)		
ACGIH	ACGIH TWA (mg/m³)	606 mg/m³
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (mg/m³)	909 mg/m³
ACGIH	ACGIH STEL (ppm)	150 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	600 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (STEL) (mg/m³)	600 mg/m³
Canada (Quebec)	VECD (mg/m ³)	909 mg/m³
Canada (Quebec)	VECD (ppm)	150 ppm
Canada (Quebec)	VEMP (mg/m ³)	606 mg/m³
Canada (Quebec)	VEMP (ppm)	100 ppm

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ACGIH	ACGIH TWA (mg/m ³)	3.5 mg/m ³
ACGIH	Remark (ACGIH)	Bronchitis
OSHA	OSHA PEL (TWA) (mg/m ³)	3.5 mg/m ³
Canada (Quebec)	VEMP (mg/m³)	10 mg/m ³ (Fibres de carbone et de graphite; Poussière totale) 5 mg/m ³ (Fibres de carbone et de graphite; Poussière respirable) 3.5 mg/m ³

Appropriate engineering controls	: Lither local exhaust or general room ventilation is usually required.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves. Use rubber gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing. Long sleeved protective clothing.
Respiratory protection	: Where excessive vapour may result, wear approved mask. Use air-purifying respirator equipped with particulate filtering cartridges.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

1,2	• •
Physical state	: Solid
Appearance	: A solid crayon-like marker.
Colour	: Black.
Odour	: Solvent.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 62 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content: 48.4%

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

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10.4. Conditions to avoid

Heat. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides. metallic oxides. Sulphur oxides.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
N-Ethyl O/P Toluene Sulfonamides (8047-99-2	A)	
LD50 oral rat	2250 mg/kg	
LD50 dermal rabbit	1000 mg/kg	
ATE CLP (oral)	2250.000 mg/kg bodyweight	
ATE CLP (dermal)	1000.000 mg/kg bodyweight	
4-tert-butylphenol (98-54-4)		
LD50 oral rat	> 2000 mg/kg No mortality observed	
LD50 dermal rabbit	> 16 g/kg No mortality observed	
LC50 inhalation rat (mg/l)	5.6 mg/l/4h	
ATE CLP (vapours)	5.600 mg/l/4h	
ATE CLP (dust,mist)	5.600 mg/l/4h	
1-butoxypropan-2-ol (5131-66-8)		
LD50 oral rat	3300 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat (ppm)	> 651 ppm/4h	
ATE CLP (oral)	3300.000 mg/kg bodyweight	
(2-Methoxymethylethoxy)-propanol (34590-94	-8)	
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	> 19020 mg/kg	
LC50 inhalation rat (mg/l)	> 1667 mg/l/4h	
Carbon black (1333-86-4)		
LD50 oral rat	> 8000 mg/kg	
LC50 inhalation rat (mg/l)	> 4.6 mg/m ³ 4 h	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
	: Suspected of causing cancer.	
Carbon black (1333-86-4)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class	
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: Not classified	
Aspiration hazard	: Not classified	
Potential adverse human health effects and syn	mptoms	
Symptoms/injuries after skin contact	Causes skin irritation.	
	: Causes serious eye irritation.	
	: Skin and eyes contact.	
- '		

SECTION 12: Ecological information

> 1 mg/l 96 h
4.8 mg/l 48 h

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1-butoxypropan-2-ol (5131-66-8)	
LC50 fishes 1	> 560 (560 - 1000) mg/l 96 h
EC50 Daphnia 1	> 1000 mg/l 48 h
(2-Methoxymethylethoxy)-propanol (34590-	94-8)
LC50 fishes 1	> 1000 mg/l Poecilia reticulata
ErC50 (algae)	> 1000 mg/l
12.2. Persistence and degradability	
4-tert-butylphenol (98-54-4)	
Biodegradation	60 % 28 d
1-butoxypropan-2-ol (5131-66-8)	
Persistence and degradability	Readily biodegradable.
,	
(2-Methoxymethylethoxy)-propanol (34590-	
Persistence and degradability	Readily biodegradable.
Carbon black (1333-86-4)	
Persistence and degradability	Not readily biodegradable.
12.3. Bioaccumulative potential	
4-tert-butylphenol (98-54-4)	
Log Pow	3
1-butoxypropan-2-ol (5131-66-8)	
Log Pow	1.2
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	ns
13.1 Waste treatment methods	
Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
SECTION 14: Transport information	
In accordance with DOT and TDG	
	regulations
Not considered a dangerous good for transport Proper Shipping Name (ADR)	-
Proper Shipping Name (ADR)	: Not applicable
Transport by sea	
No additional information available	
Air transport	
No additional information available	
SECTION 15: Regulatory information	n
15.1. US Federal regulations	
N-Ethyl O/P Toluene Sulfonamides (8047-99	-2)
Listed on the United States TSCA (Toxic Subs	
4-tert-butylphenol (98-54-4)	tonono Control Anti inventory
Listed on the United States TSCA (Toxic Subs	
1-butoxypropan-2-ol (5131-66-8)	
Listed on the United States TSCA (Toxic Subs	tances Control Act) inventory
(2-Methoxymethylethoxy)-propanol (34590-	94-8)
(2-Methoxymethylethoxy)-propanol (34590- Listed on the United States TSCA (Toxic Subs	
Listed on the United States TSCA (Toxic Subs EPA TSCA Regulatory Flag	tances Control Act) inventory
Listed on the United States TSCA (Toxic Subs	tances Control Act) inventory T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

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15.2. International regulations

CANADA

CANADA		
Quik Stik® TWIST PAINT MARKER Black		
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR	
N-Ethyl O/P Toluene Sulfonamides (8047-99-2)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
4-tert-butylphenol (98-54-4)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
1-butoxypropan-2-ol (5131-66-8)		
Listed on the Canadian DSL (Domestic Substanc	es List) inventory.	
(2-Methoxymethylethoxy)-propanol (34590-94-	8)	
Listed on the Canadian DSL (Domestic Substances List) inventory.		
Carbon black (1333-86-4)		
Listed on the Canadian DSL (Domestic Substances List) inventory.		
EU-Regulations		
N-Ethyl O/P Toluene Sulfonamides (8047-99-2)		
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)		
4-tert-butylphenol (98-54-4)		
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)		
1-butoxypropan-2-ol (5131-66-8)		
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)		

(2-Methoxymethylethoxy)-propanol (34590-94-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

Carbon black (1333-86-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Quik Stik® TWIST PAINT MARKER Black

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

- All ingredients are listed in the Toxic Substances Control Act (TSCA).
- All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

15.3. US State regulations

Carbon black (1333-86-4)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

(2-Methoxymethylethoxy)-propanol (34590-94-8)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List

Carbon black (1333-86-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Indication of changes

: Original Document.

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Data sources	: ACGIH 2000.
	Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.
	ESIS (European chemincal Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla.
	European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
	National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
	OSHA 29CFR 1910.1200 Hazard Communication Standard.
	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
	TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.
Abbreviations and acronyms	: ACGIH (American Conference of Governement Industrial Hygienists).
	ATE: Acute Toxicity Estimate.
	CAS (Chemical Abstracts Service) number.
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population.
	OSHA: Occupational Safety & Health Administration.
	PBT: Persistent, Bioaccumulative, Toxic.
	STEL: Short Term Exposure Limits.
	TSCA: Toxic Substances Control Act.
	TWA: Time Weight Average.
Other information	: None
NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

Full text of H-phrases:

ski ol 11 philaded.	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Liq. 4	Flammable liquids, Category 4
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H227	Combustible liquid
H311	Toxic in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H411	Toxic to aquatic life with long lasting effects

SDS Prepared by: The Redstone Group, LLC 6397 Emerald Pkwy. Suite 200 Dublin, OH USA 43016

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T 614-923-7472 www.redstonegrp.com

LACO SDS NA GHS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product