LA-CO Industries, Inc.

Markal® Timberstik® All Purpose Black, Blue, Green, Orange, Purple, Red, White, Yellow

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada Hazardous Products Regulations (HPR) / Règlement sur les produits dangereux (RPD)
Issue date: 4/8/2022 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : Markal® Timberstik® All Purpose Black, Blue, Green, Orange, Purple, Red, White, Yellow

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Marking.

1.3. Supplier

LA-CO Industries
1201 Pratt Blvd.
Elk Grove Village, IL, 60007-5746
US
T 847-956-7600 - F 847-956-9885
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;
全国应急中心 0532 8388 9090

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No data available

2.4. Unknown acute toxicity (GHS)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% (w/w)	GHS classification
Titanium dioxide	CAS-No.: 13463-67-7	0 – 10	Carc. 2, H351
Aluminum silicate	CAS-No.: 68476-25-5	< 2.5	Eye Irrit. 2A, H319 STOT SE 3, H335
Silicon dioxide (cristobalite)	CAS-No.: 14808-60-7	< 2.5	Carc. 1A, H350
barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate]	CAS-No.: 1103-38-4	0 – 2	Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 3, H412
Carbon black	CAS-No.: 1333-86-4	0 – 1	Carc. 2, H351

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No data available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : This product is not hazardous.

6.1.1. For non-emergency personnel

No data available

6.1.2. For emergency responders

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from open flames, hot surfaces and sources of ignition.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Markal® Timberstik® All Purpose Black, Blue, Green, Orange, Purple, Red, White, Yellow
No data available

Titanium dioxide (13463-67-7)
USA - ACGIH - Occupational Exposure Limits

Titanium dioxide (13463-67-7)	
Local name	Titanium dioxide
ACGIH TWA (mg/m³)	10 mg/m³
Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (Total dust)
OSHA PEL TWA [1]	15 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Silicon dioxide (cristobalite) (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
ACGIH TWA (mg/m³)	0.025 mg/m³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Respirable) (Silica: Crystalline)
OSHA PEL TWA [2]	250 mppcf
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO2+5)) for mppcf and (10 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	0.05 mg/m³
Remark (NIOSH)	(respirable dust)

Aluminum silicate (68476-25-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	1 mg/m³ (Respirable fraction)

barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate] (1103-38-4)
No data available

Carbon black (1333-86-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon black
ACGIH TWA (mg/m³)	3 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	

Carbon black (1333-86-4)	
Local name	Carbon black
OSHA PEL TWA [1]	3.5 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	3.5 mg/m³
NIOSH REL STEL	0.1 mg/m³

8.2. Appropriate engineering controls

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
None under normal use.

Respiratory protection:
None under normal use

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	A solid crayon-like marker.
Colour	:	Variable
Odour	:	wax like
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability (solid, gas)	:	Non flammable.
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
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive limits	:	Not applicable
Explosive properties	:	No data available
Oxidising properties	:	No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Titanium dioxide (13463-67-7)	
LD50 Oral rat	> 5000 mg/kg
LC50 Inhalation rat	> 6.82 mg/l/4h

barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate] (1103-38-4)	
LD50 Oral rat	> 5000 mg/kg
LC50 Inhalation rat	4.13 mg/l/4h
ATE (vapours)	4.13 mg/l/4h
ATE (dust,mist)	4.13 mg/l/4h

Carbon black (1333-86-4)	
LD50 Oral rat	> 8000 mg/kg
LC50 Inhalation rat	> 4.6 mg/m³ 4 h

Skin corrosion/irritation : Not classified. (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified. (The chemicals used are not available in the physical form known to cause cancer.)

Titanium dioxide (13463-67-7)	
NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat
IARC group	2B - Possibly carcinogenic to humans

Silicon dioxide (cristobalite) (14808-60-7)	
IARC group	1 - Carcinogenic to humans, Inhalation of dust

Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans, Inhalation of dust

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Aluminum silicate (68476-25-5)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : Not applicable

Likely routes of exposure : Dermal

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Titanium dioxide (13463-67-7)	
EC50 other aquatic organisms 1	> 100 mg/l Test organisms (species):

barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate] (1103-38-4)	
LC50 fish 1	50 mg/l 48 h
EC50 crustacea	> 3.8 mg/l 48 h
LC50 - Fish [2]	> 500 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)

12.2. Persistence and degradability

barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate] (1103-38-4)	
Persistence and degradability	Not readily biodegradable. Product persists.

Carbon black (1333-86-4)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

barium bis[2-[(2-hydroxynaphthyl)azo]naphthalenesuphonate] (1103-38-4)	
BCF fish 1	1.7 – 1.8 mg/l .3 mg/l conc. in envir/dose
Log Pow	-0.67 – 1.07

12.4. Mobility in soil

No data available

12.5. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated.

Proper Shipping Name (TDG) : Not regulated.

Proper Shipping Name (IMDG) : Not regulated.

Proper Shipping Name (IATA) : Not regulated.

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated.

TDG

Transport hazard class(es) (TDG) : Not regulated.

IMDG

Transport hazard class(es) (IMDG) : Not regulated.

IATA

Transport hazard class(es) (IATA) : Not regulated.

14.4. Packing group

Packing group (DOT) : Not regulated.
Packing group (TDG) : Not regulated.
Packing group (IMDG) : Not regulated.
Packing group (IATA) : Not regulated.

14.5. Environmental hazards

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Hexachlorobenzene	CAS-No. 118-74-1	0 – 0%

15.2. International regulations

Markal® Timberstik® All Purpose Black, Blue, Green, Orange, Purple, Red, White, Yellow

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Silicon dioxide (cristobalite) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Silicon dioxide (cristobalite) (14808-60-7)
Listed on Taiwan National Chemical Inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Carbon black (1333-86-4)
Listed on IARC (International Agency for Research on Cancer)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on Taiwan National Chemical Inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).
Listed on the Japanese ISHL (Industrial Safety and Health Law)

15.3. US State regulations

Green

⚠ **WARNING:** This product can expose you to Hexachlorobenzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Titanium dioxide(13463-67-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Silicon dioxide (cristobalite)(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List
Carbon black(1333-86-4)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database. Manufacturer Information. Supplier's safety documents.

Full text of H-statements	
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

Abbreviations and acronyms	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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.