FGLASS BKOTE AQUA BLUE



Bulk Sales Reference No.: SDS Revision Date: SDS Revision Number: Sales Order: {SalesOrd} YBA569 03/24/2014 A5-4

1. Identification of the preparation and company

1.1. Product identifierProduct IdentityBulk Sales Reference No.

FGLASS BKOTE AQUA BLUE YBA569

1.2. Relevant identified uses of the substance or mixture and uses advised againstIntended UseSee Technical Data Sheet.Application MethodSee Technical Data Sheet.

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Acute Tox. 4;H302Harmful if swallowed.Acute Tox. 5;H313May be harmful in contact with skin.Aquatic Chronic 1;H410Very toxic to aquatic life with long lasting effects.

2.2. Label elements Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.



H302 Harmful if swallowed.

H313 May be harmful in contact with skin.

H410 Very toxic to aquatic life with long lasting effects.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P312 Call a POISON CENTER or doctor / physician if you feel unwell.

P330 Rinse mouth.

P391 Collect spillage.

P501 Dispose of contents / container in accordance with local / national regulations.

HMIS Rating	Health: 2	Flammability: 0	Reactivity: 0

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
Copper oxide (Cu2O) CAS Number: 0001317-39-1		25 - 50	Acute Tox. 4;H302 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Zinc oxide CAS Number:	0001314-13-2	10 - 25	Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]
1,2-Propylene gly CAS Number:		1.0 - 10		[1]
Titanium dioxide CAS Number:	0013463-67-7	1.0 - 10		[1][2]
Copper oxide CAS Number:	0001317-38-0	1.0 - 10		[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 fi	rst aid measures
General	Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin	In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately.
Ingestion	If swallowed, immediately contact Poison Control Center. DO NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.
4.2. Most important	symptoms and effects, both acute and delayed
Overview	NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid contact with eyes, skin and clothing.
Inhalation	Harmful if inhaled. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizziness, headache or nausea.
Eyes	Causes severe eye irritation. Avoid contact with eyes.
Skin	Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion	Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness.
Chronic effects	Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 2 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

5. Fire-fighting measures

5.1. Extinguishing media

SMALL FIRES: Use dry chemical, CO2, water spray or foam. LARGE FIRES: Use water spray, fog, or foam. Move containers from fire area if you can do so without risk. Runoff from fire control may cause pollution. Dike fire control water for later disposal. Do not scatter the material.

5.2. Special hazards arising from the substance or mixture

Material may burn but does not ignite readily. Fire may produce irritating, corrosive and/or toxic gases. Containers may explode when heated.

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 courses.

ERG Guide No. 159

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

ELIMINATE ALL IGNITION SOURCES (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to containers. LARGE SPILLS: Dike far ahead of liquid spill to contain released material and runoff from fire control.

6.2. Environmental precautions

Do not allow spills to enter drains or watercourses.

6.3. Methods and material for containment and cleaning up

CALL CHEMTREC for emergency response. Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

7. Handling and storage

7.1. Precautions for safe handling

Handling

Vapors may cause flash fire or ignite explosively.

In Storage

Keep away from heat, sparks and flame.

7.2. Conditions for safe storage, including any incompatibilities

Store between 40-100F (4-38C).

Do not get in eyes, on skin or clothing.

Strong oxidizing agents.

Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone.

7.3. Specific end use(s)

Close container after each use.

Wash thoroughly after handling.

Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.

Exposure				
CAS No.	Ingredient	Source	Value	
0000057-55-6	1,2-Propylene glycol	OSHA		
		ACGIH		
		NIOSH		
		Supplier		

8.1. Control parameters

8. Exposure controls and personal protection

	OHSA, CAN	10 mg/m3 TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aer
	Mexico	
	Brazil	
0001314-13-2 Zinc oxide	OSHA	5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)10 mg/m3 STEL (fume)
	ACGIH	2 mg/m3 TWA (respirable fraction)10 mg/m3 STEL (respirable fraction)
	NIOSH	5 mg/m3 TWA (dust and fume)10 mg/m3 STEL (fume)15 mg/m3 Ceiling (dust)500 mg/m3 IDLH
	Supplier	
	OHSA, CAN	2 mg/m3 TWA (respirable)10 mg/m3 STEL (respirable)
	Mexico	5 mg/m3 TWA LMPE-PPT (fume); 10 mg/m3 TWA LMPE-PPT (dust)10 mg/m3 STEL [LMPE-CT] (fume)
	Brazil	
0001317-38-0 Copper oxide	OSHA	
	ACGIH	
	NIOSH	0.1 mg/m3 TWA (fume, as Cu)
	Supplier	
	OHSA, CAN	
	Mexico	
	Brazil	
0001317-39-1 Copper oxide (Cu2O)	OSHA	
	ACGIH	
	NIOSH	
	Supplier	
	OHSA,	
	CAN	
	Mexico	
	Brazil	
0013463-67-7 Titanium dioxide	OSHA	15 mg/m3 TWA (total dust)
	ACGIH	10 mg/m3 TWA
	NIOSH	5000 mg/m3 IDLH
	Supplier	
	OHSA, CAN	10 mg/m3 TWA
	Mexico	10 mg/m3 TWA LMPE-PPT (as Ti)20 mg/m3 STEL [LMPE-CT] (as Ti)
	Brazil	

Health DataCAS No.IngredientSourceValue000057-55-61,2-Propylene glycolNIOSH0001314-13-2Zinc oxideNIOSH0001317-38-0Copper oxideNIOSH0001317-39-1Copper oxide (Cu2O)NIOSH0013463-67-7Titanium dioxideNIOSH

Carcinogen Data				
CAS No.	Ingredient	Source	Value	
0000057-55-6	1,2-Propylene glycol	OSHA Select Carcinogen: No		
		NTP	Known: No; Suspected: No	
			Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
0001314-13-2	Zinc oxide	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;
0001317-38-0	Copper oxide	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;
0001317-39-1	Copper oxide (Cu2O)	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: Yes
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;

8.2. Exposure controls Respiratory	Select equipment to provide protection from the ingredients listed in Section 3 of this document. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates dust, vapor, or mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. FOR USERS OF 3M RESPIRATORY PROTECTION ONLY.
Eyes	Avoid contact with eyes. Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.
Skin	Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, protective gloves, apron, boots, head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.
Engineering Controls Other Work Practices	Depending on the site-specific conditions of use, provide adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, using toilet facilities, etc. Promptly remove soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap and water.

9. Physical and chemical properties				
Appearance	Blue Liquid			
Odour threshold	Not Measured			
рН	8.5			
Melting point / freezing point	Not Measured			
Initial boiling point and boiling range	100 (°C) 212 (°F)			
Flash Point	93 (°C) 200 (°F)			
Evaporation rate (Ether = 1)	Not Measured			
Flammability (solid, gas)	Not Applicable			
Upper/lower flammability or explosive limits Lower Explosive Limit: .62				
	Upper Explosive Limit: No Established Limit			
vapor pressure (Pa)	Not Measured			
Vapor Density	Heavier than air			
Specific Gravity	2.14			
Partition coefficient n-octanol/water (Log Kow)	Not Measured			

Auto-ignition temperatureNot MeasuredDecomposition temperatureNot MeasuredViscosity (cSt)No Established LimitVOC %Refer to the Technical Data Sheet or label where information is available.

10. Stability and reactivity

10.1. Reactivity
No data available
10.2. Chemical stability
This product is stable and hazardous polymerization will not occur. Not sensitive to mechanical impact.
Excessive heat and fumes generation can occur if improperly handled.
10.3. Possibility of hazardous reactions
No data available
10.4. Conditions to avoid
No data available
10.5. Incompatible materials
Strong oxidizing agents.
10.6. Hazardous decomposition products
Material may burn but does not ignite readily. Fire may produce irritating, corrosive and/or toxic gases.
Containers may explode when heated.

11. Toxicological information

Acute toxicity

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr
Copper oxide (Cu2O) - (1317-39-1)	470.00, Rat - Category: 4	2,000.00, Rabbit - Category: 4	No data available	50.00, Rat - Category: NA
Zinc oxide - (1314-13-2)	5,000.00, Rat - Category: 5	No data available	No data available	2.50, Mouse - Category: 4
1,2-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
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
Copper oxide - (1317-38-0)	470.00, Rat - Category: 4	No data available	No data available	No data available

Item	Category	Hazard
Acute Toxicity (mouth)	4	Harmful if swallowed.
Acute Toxicity (skin)	5	May be harmful in contact with skin.
Acute Toxicity (inhalation)	Not Classified	Not Applicable
Skin corrosion/irritation	Not Classified	Not Applicable
Eye damage/irritation	Not Classified	Not Applicable
Sensitization (respiratory)	Not Classified	Not Applicable
Sensitization (skin)	Not Classified	Not Applicable
Germ toxicity	Not Classified	Not Applicable
Carcinogenicity	Not Classified	Not Applicable
Reproductive Toxicity	Not Classified	Not Applicable
	Not Classified	Not Applicable

Specific target organ systemic toxicity (single exposure)		
Specific target organ systemic Toxicity (repeated exposure)	Not Classified	Not Applicable
Aspiration hazard	Not Classified	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,	48 hr EC50 crustacea,	ErC50 algae,
	mg/l	mg/l	mg/l
Copper oxide (Cu2O) - (1317-39-1)	0.075, Danio rerio	0.042, Daphnia similis	0.03 (96 hr), Pseudokirchneriella subcapitata
Zinc oxide - (1314-13-2)	1.10, Oncorhynchus	0.098, Daphnia	0.042 (72 hr), Pseudokirchneriella
	mykiss	magna	subcapitata
1,2-Propylene glycol - (57-55-6)	710.00, Pimephales promelas	10,000.00, Daphnia magna	Not Available
Titanium dioxide -	1,000.00, Fundulus	5.50, Daphnia magna	5.83 (72 hr), Pseudokirchneriella
(13463-67-7)	heteroclitus		subcapitata
Copper oxide -	25.40, Oncorhynchus mykiss	0.011, Daphnia	0.014 (72 hr), Pseudokirchneriella
(1317-38-0)		magna	subcapitata

12.2. Persistence and degradability
No data available
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

Do not allow spills to enter drains or watercourses.

Dispose of in accordance with local, state and federal regulations. (Also reference RCRA information in Section 15 if listed).

14. Transport information 14.1. UN number Not Regulated 14.2. UN proper shipping name Not Regulated 14.3. Transport hazard class(es) IMO / IMDG (Ocean Transportation) DOT (Domestic Surface Transportation) IMO / IMDG (Ocean Transportation) DOT Proper Shipping Not Regulated IMDG Proper Name Shipping Name DOT Hazard Class Not Regulated

IMDG Hazard Class Not Regulated

				Sub Class	Not applicable			
UN / NA Number	· No	t Regulated		000 01033				
		•		ADC Backing Group	Not Regulated			
DOT Packing Gr	-	t Regulated		• •	Not Regulated			
CERCLA/DOT R	lQ 28 lbs	723 gal. / 511247		system Reference	9			
	105		C	Jude				
14.4 Booking group		Not Dogul	atad					
14.4. Packing group		Not Regul	aleo					
14.5. Environmental hazards								
IMDG Marine Pollutant: Yes (Copper oxide (Cu2O))								
14.6. Special precaution		er						
Not Applicable								
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code								
Not Applicable								
15. Regulatory information								
Pogulatory Overview	The rea	ulatony data in Soction	15 in not in	standed to be all inclu	univer apply appleated			
negulatory Overview	egulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA							
					be listed on the TSCA			
	Inventor		,					
WHMIS Classification	Not Reg	ulated						
	-							
DOT Marine Pollutants								
(No Product Ingredients Listed)								
DOT Severe Marine Pollutants (1%):								
(No Product Ingre		,						
EPCRA 311/312 Chem		()						
		(no reporting of relea	ases of this	hazardous substance	e is			
required if the diar	,							
EPCRA 302 Extremely								
(No Product Ingredients Listed)								
EPCRA 313 Toxic Chemicals (>.1%):								
Copper								
Mass RTK Substances (>1%) :								
Titanium dioxide								
Zinc oxide								
Penn RTK Substances (>1%) :								
1,2-Propylene glycol								
Titanium dioxide								
Zinc oxide								
Penn Special Hazardous Substances (>.01%) :								
(No Product Ingredients Listed)								
RCRA Status:								
(No Product Ingredients Listed)								
N.J. RTK Substances (>1%) :								
1,2-Propylene glycol								
Titanium dioxide								
Zinc oxide								
N.J. Special Hazardous Substances (>.01%) : (Na Braduct Ingradianta Listed)								
(No Product Ingredients Listed)								
Ammonium hydroxide								
N.J. Env. Hazardous Substances (>.1%) :								
Copper								
Proposition 65 - Carcinogens (>0%): Cadmium								
Lead								
Titanium dioxide								

Proposition 65 - Female Repro Toxins (>0%): Lead Proposition 65 - Male Repro Toxins (>0%): Cadmium Lead Proposition 65 - Developmental Toxins (>0%): Cadmium Lead

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:

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This is the first revision of this SDS format, changes from previous revision not applicable.

End of Document