SAFETY DATA SHEET

Section 1. Identified	cation
GHS product identifier	
Product code	
Other means of identification	
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Identified uses	
Supplier's details	:
Emergency telephone number (with hours of operation)	:
Section 2. Hazard	s identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	: H318 - Causes serious eye damage.
Precautionary statements	
Prevention	: P280 - Wear eye or face protection.
Response	: P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture Other means of

: Mixture

identification

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Ingredient name	%	CAS number
	≥3 - ≤5	7681-57-4
Alcohols, C12-13, ethoxylated	≥1 - ≤3	66455-14-9

The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary firs	t aid measures
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

otential acute health	<u>n effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: High mist concentrations may cause irritation of respiratory tract
Skin contact	: Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	: May cause discomfort if swallowed.

Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	: Adverse symptoms may include the following: stomach pains cal attention and special treatment needed, if necessary	
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	0

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media : Use dry chemical, CO2, water spray (fog) or foam. media : Use dry chemical, CO2, water spray (fog) or foam. Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire. Specific hazards arising from the chemical : No specific fire or explosion hazard. Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable		-
media Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire. Specific hazards arising from the chemical : No specific fire or explosion hazard. Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides Special protective actions : Promptly isolate the scene by removing all persons from the vicinity of the incident if	Extinguishing media	
media Specific hazards arising from the chemical Hazardous thermal decomposition products : Promptly isolate the scene by removing all persons from the vicinity of the incident if	• •	: Use dry chemical, CO ₂ , water spray (fog) or foam.
from the chemical Hazardous thermal Hazardous thermal : Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides Special protective actions : Promptly isolate the scene by removing all persons from the vicinity of the incident if	• •	: Do not use water jet as an extinguisher, as this will spread the fire.
decomposition products carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides metal oxide/oxides Special protective actions : Promptly isolate the scene by removing all persons from the vicinity of the incident if	•	: No specific fire or explosion hazard.
		carbon dioxide carbon monoxide sulfur oxides
training.	Special protective actions for fire-fighters	there is a fire. No action shall be taken involving any personal risk or without suitable
Special protective equipment for fire-fighters should wear appropriate protective equipment and self-contained breath apparatus (SCBA) with a full face-piece operated in positive pressure mode.		: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	tiv	e equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	nta	ainment and cleaning up
Spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash

upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sodium Metabisulphite Alcohols, C12-13, ethoxylated	ACGIH TLV (United States, 3/2017). TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. None.
Appropriate engineering controls	: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection meas	<u>ures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	:	Liquid. [Clear.]
Color	:	Light yellow.
Odor	:	Slight sulfur.
Odor threshold	:	Not available.
рН	:	4.5
Melting point	1	Not available.
Boiling point	1	Not available.
Flash point	:	Closed cup: >93.33°C (>200°F)
Evaporation rate	1	<1 (Butyl acetate = 1)
Flammability (solid, gas)	:	Not applicable.
Lower and upper explosive (flammable) limits	1	Not applicable.
Vapor pressure	1	Not available.
Vapor density	:	>1 [Air = 1]
Relative density	:	1.05
Solubility	:	Complete in water.
Partition coefficient: n- octanol/water	1	Not available.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	1	Not available.
Viscosity	1	Not available.
Flow time (ISO 2431)	1	Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials. Do not mix with other chemicals or household cleaners.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Metabisulphite Alcohols, C12-13, ethoxylated	LD50 Oral LD50 Oral		1131 mg/kg >10 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
	Eyes - Mild irritant Skin - Moderate irritant	Rabbit Rabbit		24 hours 100 mg 24 hours 500 µl	-

Sensitization

Skin

: This product is not expected to cause skin sensitization.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Sodium Metabisulphite	-	3	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely : Dermal contact. Eye contact. Inhalation. Ingestion.

routes of exposure

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: High mist concentrations may cause irritation of respiratory tract.
Skin contact	: Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	: May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur

Section 11. Toxicological information

Ingestion

: Adverse symptoms may include the following: stomach pains

Delayed and immediate effec	ts a	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	1	No known significant effects or critical hazards.
Potential delayed effects	1	No known significant effects or critical hazards.
Long term exposure		
Potential immediate effects	1	No known significant effects or critical hazards.
Potential delayed effects	1	No known significant effects or critical hazards.
Potential chronic health effe	ect	<u>s</u>
General	1	No known significant effects or critical hazards.
Carcinogenicity	1	No known significant effects or critical hazards.
Mutagenicity	1	No known significant effects or critical hazards.
Teratogenicity	1	No known significant effects or critical hazards.
Developmental effects	1	No known significant effects or critical hazards.
Fertility effects	1	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	16792.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Sodium Metabisulphite	Acute LC50 32 mg/L Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Sodium Metabisulphite	-3.7	-	low
Alcohols, C12-13, ethoxylated	2.03 to 5.26		low

Mobility in soil

Soil/water	partition
coefficient	(Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

AERG : Not applicable

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
<u>SARA 302/304</u>	
_	

No products were found.

Section 15. Regulatory information

SARA 304 RQ

: Not applicable.

SARA 311/312 Classification

: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Composition/information on ingredients

Name	Classification
Sodium Metabisulphite ACUTE TOXICITY (oral) - Category 4	
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Alcohols, C12-13, ethoxylated	ACUTE TOXICITY (oral) - Category 4
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SARA 313

There is no data available.

State regulations

Massachusetts	 The following components are listed: (2-Methoxymethylethoxy)propanol; Sodium Metabisulphite
New York	: None of the components are listed.
New Jersey	 The following components are listed: (2-Methoxymethylethoxy)propanol; Sodium Metabisulphite
Pennsylvania	 The following components are listed: (2-Methoxymethylethoxy)propanol; Sodium Metabisulphite

California Prop. 65

No products were found.

Section 16. Other information

Procedure used to derive the classification

Classification SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1		Justification
		Calculation method
History		
Date of issue mm/dd/yyyy	: 02/28/2019	
Date of previous issue	: 08/19/2016	
Version	: 3	
Prepared by	: KMK Regulatory Services Inc.	
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations 	

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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