

SAFETY DATA SHEETS

This SDS packet was issued with item:

077061138

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078462803 078924231

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

077061229

BISMUSAL®

Section 1: Identification of the Substance and Supplier

Product Name	Bismusal® Suspension
Recommended Use	Anti-diarrheal
Company Details	Aspen Veterinary Resources®, Ltd.
Emergency Telephone	800-424-9300
Date of Preparations	11/11/15

Section 2: Hazards Identification

Hazard Classification	Not Hazardous
Priority Identifiers	None
Secondary Identifiers	None
Risk & Safety Phrases	For oral use only

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration
Bismuth Subsalicylate	14882-18-9	1.75% w/v
Guar Gum	NONE	0 - 10% w/v
Dextrose Monohydrate	50-99-7	0 - 10% w/v
Edetate Disodium	139-33-3	0 - 1% w/v
Methyl Salicylate	99-76-3	0 - 1% w/v
Methyl Paraben	119-36-8	0 - 1% w/v
Propyl Paraben	94-13-3	0 - 1% w/v
Sodium Carbonate	497-19-8	0 - 1% w/v
Sorbitol Solution – 70%	50-70-4	0 - 10% v/v
FD&C Red #40	68583-95-9	0 - 1% w/v
Water for Injection	7732-18-5	QS

Concentrations are listed as a range to protect proprietary information. The variations have no material effect on the safety data reported.

Section 4: First Aid Measures

Necessary First Aid Measures	Skin: Wash with soap and water Eyes: Flush with water Inhalation: None Ingestion: Drink plenty of water. If symptoms persist contact physician
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Section 5: Fire Fighting Measures

Type of Hazard	Not Flammable
Fire Hazard Properties	None Applicable
Regulatory Requirements	None Applicable
Extinguishing Media and Methods	CO ₂ , extinguishing powder or water spray
Hazchem Code	None Applicable
Recommended Protective Clothing	Gloves and protective eyewear

Section 6: Accidental Release Measures

Emergency Procedures	Flush spills with water
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Section 7: Handling and Storage

Precautions for Safe Handling	None required
Regulatory Requirements	None
Handling Practices	Keep container tightly sealed. Use according to label instructions
Approved Handlers	Not required
Conditions for Safe Storage	Controlled room temperature. Protect from freezing.
Store Site Requirements	Store at room temperature not above 37°C (98.6°F)

Section 8: Exposure control/Personal Protection

Workplace Exposure Standards	None Applicable
Application in the workplace	None Applicable
Exposure standards outside the workplace	None Applicable
Personal protection	Protective apparel is required

Section 9: Physical and Chemical Properties

Appearance	Thick, Pink suspension
Boiling Point	About 100°C
Melting/Softening point	None Applicable
Vapor Pressure	Not determined
Specific Gravity	About 1.02
Solubility (H ₂ O)	Bismusal subsalicylate is insoluble
Percent Volatiles	None present
Evaporation Rates	Not determined

Section 10: Stability and Reactivity

Stability of the Substance	Stable when stored per label instructions
Conditions to Avoid	Excessive heat
Material to Avoid	None
Hazardous Decomposition Products	Burning may emit toxic fumes including carbon dioxide, carbon monoxide, methanol and phenol

Section 11: Toxicological Information

Acute effects for individual ingredients only

No acute effects have been identified

Section 12: Environmental Information

Effects for individual ingredients only

None Applicable

Section 13: Disposal Considerations

Disposal Information	Flush small spills with water. For large spills, use clay or suitable absorbent material, shovel into DOT containers and dispose accordingly
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SAFETY DATA SHEET

Reference	None Applicable
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Section 14: Transport Information

Relevant Information	Follow local, state and federal regulations
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Section 15: Regulatory Information

Regulatory Status	None Applicable
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Section 16: Other Information

Additional Information	Keep out of reach of children. For animal use only.
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View Section : 12345678910111213141516
Personal Protective Pictograms

Gloves

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION (N/A)

Product Name:Ionoseal

Distributor Name: Voco GmbH

Distributor Address: Anton-Flettner-Str. 1-3
D-27472 Cuxhaven

Further information obtainable from: Scientific department

Information in case of emergency: Scientific department tel. +49 (0)
4721 7190

Revision Date:06.03.2009

Trade Names:Ionoseal

Manufacturer Name:Voco GmbH

Address:Anton-Flettner-Str. 1-3
D-27472 Cuxhaven

Further information obtainable from: Scientific department

Information in case of emergency: Scientific department tel. +49 (0)
4721 7190

General Use: Application of the substance/the preparation: Light
curing glass ionomer composite cement

Safety Data Sheet according to 1907/2006/EC, Article 31

To Top of page

SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS: (N/A)

Ingredient NameCAS#Ingredient Percent

BIS-GMA1565-94-210-25%
EC Index Number:1
Hazard Symbols:Xi
Risk Phrases:R 36/38

Urethanedimethacrylate72869-86-45-10%
EINECS:276-957-5
EC Index Number:1
Risk Phrases:R 52/53

HEDMA6606-59-35-10%
EC Index Number:1
Hazard Symbols:Xi, N
Risk Phrases:R 36/37/38-51/53

Comments: Dangerous components.
Chemical characterization: Description: Mixture of substances listed
above with nonhazardous additions.

To Top of page

SECTION 3 : HAZARDS IDENTIFICATION: (N/A)

Environment Hazards: Information concerning particular hazards for
human and environment:
The product has to be labelled due to the calculation procedure of
the "General Classification guideline for preparations of the EU" in
the latest valid version.
Hazard description: Not applicable.

Classification system: The classification is according to the latest
editions of the EU-lists, and extended by company and literature
data.

To Top of page

SECTION 4 : FIRST AID MEASURES: (N/A)

Eye Contact: Rinse opened eye for several minutes under running

water. Then consult a doctor.
Skin Contact:Immediately rinse with water.
Inhalation:Seek medical treatment in case of complaints.
Ingestion:After swallowing: If symptoms persist consult

doctor.

To Top of page

SECTION 5 : FIRE FIGHTING MEASURES: (N/A)

Explosion: Danger of explosion: Product does not present an explosion hazard.
Flash Point: Not applicable.
Auto Ignition Temperature: Product is not selfigniting.
Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.
Protective Equipment: No special measures required.

To Top of page

SECTION 6 : ACCIDENTAL RELEASE MEASURES: (N/A)

Personal Precautions: Person-related safety precautions: Not required.
Spill Cleanup Measures: Measures for cleaning/collecting: Pick up mechanically.
Environmental Precautions: Measures for environmental protection: No special measures required.

To Top of page

SECTION 7 : HANDLING and STORAGE: (N/A)

Handling: Information for safe handling: For dental use only.

Information about fire - and explosion protection: No special measures required.
Storage: Requirements to be met by storerooms and receptacles: See storage instructions on package

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.
Hygiene Practices: Wash hands before breaks and at the end of work.

To Top of page

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION: (N/A)

Personal Protective Equipment

Routine Handling:General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Hand Protection Description:Protective gloves

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory Protection:Not required.

Exposure Limits:Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information about design of technical facilities:

No further data; see section 7.

Additional information: The lists valid during the making were used as basis.

To Top of page

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES: (N/A)

Physical State/Appearance:Form: Pasty

Color:According to product specification

Odor:Characteristic

Flash Point:Not applicable.

Auto Ignition Temperature:Product is not selfigniting.

Boiling Point:Undetermined.

Melting Point:Undetermined.

Solubility:In/Miscibility with water: Not miscible or difficult to mix.

Density:Not determined.

Danger of explosion:Product does not present an explosion hazard.

To Top of page

SECTION 10 : STABILITY and REACTIVITY: (N/A)

Conditions to Avoid:No decomposition if used according to specifications.
Reactivity: Dangerous reactions: No dangerous reactions known.
Hazardous Decomposition Products:Thermal decomposition: No decomposition if used according to specifications.

Dangerous decomposition products: No dangerous decomposition products known.

To Top of page

SECTION 11 : TOXICOLOGICAL INFORMATION: (N/A)

Applies to All Ingredients :
Sensitization:No sensitizing effects known.
Irritation:Primary irritant effect:
On the skin: No irritant effect.

On the eye: No irritating effect.

To Top of page

SECTION 12 : ECOLOGICAL INFORMATION: (N/A)

General notes:Generally not hazardous for water

To Top of page

SECTION 13 : DISPOSAL CONSIDERATIONS: (N/A)

Waste Disposal:Product:
Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

To Top of page

SECTION 14 : TRANSPORT INFORMATION: (N/A)

Maritime Pollutant:No

To Top of page

SECTION 15 : REGULATORY INFORMATION: (N/A)

Applies to all ingredients:

European International Regulations:Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives/Ordinance on Hazardous Materials.

Safety Phrase:26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of soap and water.

36/37 Wear suitable protective clothing and gloves.

To Top of page

SECTION 16 : ADDITIONAL INFORMATION: (N/A)

MSDS Revision Date:06.03.2009

MSDS Author:Department issuing MSDS: Scientific department

Contact: Tel.: +49 (0) 4721 7190

Disclaimer:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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To Top of page



SAFETY DATA SHEET

Bismusol Suspension

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

<u>1.1 TRADE NAME (AS LABELED):</u>	<i>Bismusol Suspension</i>
<u>SYNONYMS:</u>	Not Available
<u>CAS#:</u>	Mixture
<u>1.2 PRODUCT USE:</u>	Anti-Diarrheal
<u>CHEMICAL SHIPPING NAME/CLASS:</u>	Non-Regulated
<u>U.N. NUMBER:</u>	N/A
<u>1.3 MANUFACTURER'S NAME:</u>	ASPEN VETERINARY RESOURCES.
<u>EMERGENCY PHONE:</u>	800-424-9300 (Chemtrec U.S. – 24 Hrs)
<u>DATE OF CURRENT REVISION:</u>	June 22, 2015
<u>DATE OF LAST REVISION:</u>	New

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a pink suspension with a methyl salicylate odor.

Health Hazards: Repeated or prolonged exposure may cause slight irritation to skin. May cause slight irritation to eyes upon contact.

Flammability Hazards: This product is a non-combustible liquid with a flash point > 200°F (93°C)

Reactivity Hazards: None known

Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this product may have adverse effects in the aquatic environment.

US DOT SYMBOLS
Non-Regulated

CANADA (WHMIS) SYMBOLS
Complies with WHMIS 2015

EUROPEAN and (GHS) Hazard Symbols
None
Signal Word: Not Applicable

2.1 GHS LABELING AND CLASSIFICATION:

CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does not meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910.1200 AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number:

EC# 231-791-2 This substance is not classified in the Annex VI of Directive 67/548/EEC

EC# 238-953-1 This substance is not classified in the Annex VI of Directive 67/548/EEC

Substances not listed either individually or in group entries must be self classified.

Component(s) Contributing to Classification(s)

All Ingredients

2.2 LABEL ELEMENTS:

GHS Hazard Classification(s):

None Applicable

Hazard Statement(s):

None Applicable

Precautionary Statement(s):

None Applicable



SAFETY DATA SHEET

Bismusol Suspension

2.3 HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin or eyes, inhalation and ingestion. The symptoms of overexposure are described below:

ACUTE:

INHALATION: Inhalation of mist or spray may cause respiratory irritation.

CONTACT WITH SKIN: Prolonged or repeated contact may cause slight irritation.

EYE CONTACT: Contact may cause slight eye irritation.

INGESTION: Under normal conditions of intended use, this material is not expected to be an ingestion hazard.

CHRONIC: No data available

TARGET ORGANS: Acute: Eyes, Skin Chronic: N/A

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	GHS Hazard Classification
Water	96.75%	7732-18-5	231-791-2	Not Classified
Bismuth Subsalicylate	1 – 3%	14882-18-9	238-953-1	Not Classified
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).				

NOTE: This product has been classified in accordance with the hazard criteria of the CFR and the SDS contains all the information required by the CFR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists or blurred vision occurs.

SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Some individuals may develop skin sensitization from exposure.

4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Contact with skin and eyes may cause slight irritation.

4.3 RECOMMENDATIONS TO PHYSICIANS:

Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray: Yes	Carbon Dioxide: Yes
Foam: Yes	Dry Chemical: Yes
Halon: Yes	Other: Any "C" Class

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

This product is a non-combustible liquid with a flash point >200°F (93°C).

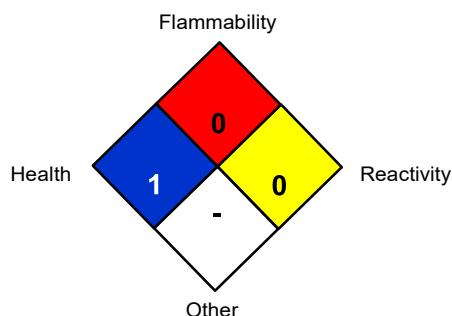
Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No



5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD (BLUE)		1	
FLAMMABILITY HAZARD (RED)		0	
PHYSICAL HAZARD (YELLOW)		0	
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Use cautious judgment when cleaning up spill. Wear suitable protective clothing, gloves, and eye/face protection.

6.2 ENVIRONMENTAL PRECAUTIONS:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

6.3 SPILL AND LEAK RESPONSE:

Stop the flow of material, if this can be done safely. Dike and contain the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate, transfer the liquid and solid diking material to containers for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Use good hygiene practices. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Use good hygiene practices.

7.2 STORAGE AND HANDLING PRACTICES:

Store in original container. Keep container closed. Store in a cool, dry location. Avoid exposure to ignition sources and incompatible materials.

7.3 SPECIFIC USES:

See section 1.2 for details.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Water	7732-18-5	Not Listed	Not Listed
Bismuth Subsalicylate	14882-18-9	Not Listed	Not Listed



SAFETY DATA SHEET

Bismusol Suspension

8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical splash goggles are recommended to avoid contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves are recommended to prevent contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use as appropriate to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is a pink suspension.

ODOR: Methyl Salicylate Odor.

ODOR THRESHOLD: Not Available

pH: 3.0-5.0

MELTING/FREEZING POINT: Not Available

BOILING POINT: Not Available

FLASH POINT: >200°F (93°C).

EVAPORATION RATE (n-BuAc=1): Not Available

FLAMMABILITY (SOLID, GAS): Non-Flammable

UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available

VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available

VAPOR DENSITY: Not Available

RELATIVE DENSITY: Not Available

DENSITY: Not Available

SOLUBILITY IN WATER: Miscible

SPECIFIC GRAVITY: 1.00

WEIGHT PER GALLON: 8.3lbs/gal

PARTITION COEFFICIENT (n-octanol/water): Not Available

AUTO-IGNITION TEMPERATURE: Not Available

DECOMPOSITION TEMPERATURE: Not Available

VISCOSITY: 1,500 CPS-10,000 CPS

VOC g/l / Lb/gal: Not Available

9.2 OTHER INFORMATION:

No additional information available.

10. STABILITY and REACTIVITY

10.1 REACTIVITY:

This product is not reactive.

10.2 STABILITY:

Stable under conditions of normal storage and use.



SAFETY DATA SHEET

Bismusol Suspension

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Will not occur.

10.4 CONDITIONS TO AVOID:

Incompatible materials, excessive heat.

10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Not expected to occur.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA:

No LD₅₀ Data Available.

SUSPECTED CANCER AGENT: None of the ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore not are considered to be, or suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin and eyes.

SENSITIZATION TO THE PRODUCT: This product is not a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Eye contact – may cause irritation.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Prolonged exposure can be irritating to the skin.

ASPIRATION HAZARD: None

12. ECOLOGICAL INFORMATION

12.1 TOXICITY:

No toxicity data available.

12.2 PERSISTENCE AND DEGRADABILITY:

No specific data available on this product.

12.3 BIOACCUMULATIVE POTENTIAL:

No specific data available on this product.

12.4 MOBILITY IN SOIL:

No specific data available on this product.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT:

No specific data available on this product.

12.6 OTHER ADVERSE EFFECTS:

No specific data available on this product.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.7 WATER ENDANGERMENT CLASS:

Not water endangering in accordance with EU Guideline 91/155-EWG.

12.8 SPECIFIC AVAILABLE COMPONENT INFORMATION:

No additional data available.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU Waste Code:

Not determined.



SAFETY DATA SHEET

Bismusol Suspension

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows:

14.1 PROPER SHIPPING NAME: Not Regulated

14.2 HAZARD CLASS NUMBER and DESCRIPTION: N/A

14.3 UN IDENTIFICATION NUMBER: N/A

14.4 PACKING GROUP: N/A

14.5 DOT LABEL(S) REQUIRED: N/A

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: N/A

RQ QUANTITY: None

14.6 MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.7 SPECIAL PRECAUTIONS FOR USER:

None

14.8 INTERNATIONAL TRANSPORTION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

14.9 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

15.1 UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015.

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does not meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for full Details.

15.4 AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.



SAFETY DATA SHEET

Bismusol Suspension

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Paul Eigbrett – (**GHS MSDS Compliance PLUS**)

DATE OF PRINTING: June 22, 2015

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 the need that information is current, applicable and suited to the circumstances of use. First Priority, Inc assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, the supplier assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

END OF SDS SHEET

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

1 Identification

- **Product identifier**
- **Trade name:** *Ionoseal*
- **Application of the substance / the mixture** *Light-curing glass ionomer cement*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
VOCO GmbH
Anton-Flettner-Str. 1-3
D-27472 Cuxhaven
- **Information department:** *Scientific department tel. +49 (0)4721-719-0*
- **Emergency telephone number:** *Scientific department tel. +49 (0)4721-719-0*

2 Hazard(s) identification

Health effects are based on the unmixed/uncured material.
Under FDA regulations this product is classified as a medical device.
Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (HCS).

- **Classification of the substance or mixture**
The product is classified according to the Globally Harmonized System (GHS).



Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **Hazard pictograms** *GHS07*
- **Signal word** *Warning*
- **Hazard statements**
May cause an allergic skin reaction.
- **Precautionary statements**
Wear protective gloves / protective clothing.
If skin irritation or rash occurs: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** *Use only for intended scope of application*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

· Dangerous components:

	<i>fluoro-aluminosilicate glass</i>	<i>50-100%</i>
	<i>Eye Irrit. 2A, H319</i>	
<i>1565-94-2</i>	<i>BIS GMA</i>	<i>10-25%</i>
	<i>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317</i>	
<i>6606-59-3</i>	<i>1,6-hexanediylbismethacrylate</i>	<i>5-10%</i>
	<i>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335</i>	
<i>109-16-0</i>	<i>Triethylene glycol dimethacrylate</i>	<i>2.5-5%</i>
	<i>Skin Sens. 1, H317</i>	

US

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

Trade name: **Ionoseal**

(Contd. of page 1)

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Seek medical treatment in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** For dental use only.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** See storage instructions on package
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

Trade name: **Ionoséal**

(Contd. of page 2)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	Pasty
· Form:	According to product specification
· Color:	Characteristic
· Odor:	
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range: Undetermined.	
Boiling point/Boiling range: Undetermined.	
· Flash point:	Not applicable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

Trade name: Ionoseal

(Contd. of page 3)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

128-37-0	2,6-di-tert-butyl-p-cresol
----------	----------------------------

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | - |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | - |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | - |
| · DOT, ADR, IMDG, IATA | Void |

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

Trade name: Ionoseal

(Contd. of page 4)

- | | |
|--|-----------------|
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed

· TLV (Threshold Limit Value established by ACGIH)

128-37-0 2,6-di-tert-butyl-p-cresol

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms GHS07

· Signal word Warning

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Wear protective gloves / protective clothing.

If skin irritation or rash occurs: Get medical advice/attention.

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

16 Other information

The information contained herein is based on our present knowledge and is believed to be correct at the date issued. The information is subject to change without notice. However, all information, statements, recommendations or suggestions shall not constitute any guarantee, representation or warranty, expressed or implied.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/20/2016

Reviewed on 09/20/2016

Trade name: Ionoseal

(Contd. of page 5)

Final determination whether the product is fit and suitable for a particular purpose and the user's method of use or application is the sole responsibility of the user.

· **Department issuing SDS:** Scientific department

· **Contact:** Tel.: +49 (0)4721-719-0

· **Date of preparation / last revision** 09/20/2016 / 8

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

1 Identification

- **Product identifier**
- **Trade name:** *Ionoseal*
- **Application of the substance / the mixture** *Light-curing glass ionomer cement*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
VOCO GmbH
Anton-Flettner-Str. 1-3
D-27472 Cuxhaven
- **Information department:** *Scientific department tel. +49 (0)4721-719-0*
- **Emergency telephone number:** *Scientific department tel. +49 (0)4721-719-0*

2 Hazard(s) identification

Health effects are based on the unmixed/uncured material.
Under FDA regulations this product is classified as a medical device.
Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (HCS).

- **Classification of the substance or mixture**
The product is classified according to the Globally Harmonized System (GHS).



Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **Hazard pictograms** *GHS07*
- **Signal word** *Warning*
- **Hazard statements**
May cause an allergic skin reaction.
- **Precautionary statements**
Wear protective gloves / protective clothing.
If skin irritation or rash occurs: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** *Use only for intended scope of application*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

· Dangerous components:

	<i>fluoro-aluminosilicate glass</i>	<i>50-100%</i>
	<i>Eye Irrit. 2A, H319</i>	
<i>1565-94-2</i>	<i>BIS GMA</i>	<i>10-25%</i>
	<i>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317</i>	
<i>6606-59-3</i>	<i>1,6-hexanediylbismethacrylate</i>	<i>5-10%</i>
	<i>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335</i>	
<i>109-16-0</i>	<i>Triethylene glycol dimethacrylate</i>	<i>2.5-5%</i>
	<i>Skin Sens. 1, H317</i>	

US

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

Trade name: Ionoseal

(Contd. of page 1)

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Seek medical treatment in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** For dental use only.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** See storage instructions on package
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

Trade name: Ionoseal

(Contd. of page 2)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Pasty
 - Color:** According to product specification
 - Odor:** Characteristic
- **pH-value:** Not determined.
- **Change in condition**
 - Melting point/Melting range:** Undetermined.
 - Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined.
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

 US
 (Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

Trade name: Ionoseal

(Contd. of page 3)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

128-37-0 2,6-di-tert-butyl-p-cresol

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-------------------------------------|------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | - |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | - |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | - |
| · DOT, ADR, IMDG, IATA | Void |

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

Trade name: Ionoseal

(Contd. of page 4)

- | | |
|--|-----------------|
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients are listed

- **TLV (Threshold Limit Value established by ACGIH)**

128-37-0 2,6-di-tert-butyl-p-cresol

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07

- **Signal word** Warning

- **Hazard statements**

May cause an allergic skin reaction.

- **Precautionary statements**

Wear protective gloves / protective clothing.

If skin irritation or rash occurs: Get medical advice/attention.

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

16 Other information

The information contained herein is based on our present knowledge and is believed to be correct at the date issued. The information is subject to change without notice. However, all information, statements, recommendations or suggestions shall not constitute any guarantee, representation or warranty, expressed or implied.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/11/2019

Reviewed on 10/11/2019

Trade name: Ionoseal

(Contd. of page 5)

Final determination whether the product is fit and suitable for a particular purpose and the user's method of use or application is the sole responsibility of the user.

· **Department issuing SDS:** Scientific department

· **Contact:** Tel.: +49 (0)4721-719-0

· **Date of preparation / last revision:** 10/11/2019 / 9

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

US