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Section 1: Product & Company Information

Product Identifier: Sodium Bisulfite Solution, 40% solution

Other Means of Identification Product Number: 143009

Recommended Use and Restrictions on Use Recommended Use: No data available. Restrictions on Use: No data available.

Manufacturer / Importer / Supplier / Distributor Information Company Name: CORECHEM Inc. Address: 4320 Greenway Drive Knoxville, TN 37918 USA

> Information Telephone Number: 1-865-524-4239 Fax Number: 1-865-524-3375 Website: www.corecheminc.com Contact Person: Regulatory Manager E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s) Corrosive to Metals - 1

Health Hazard(s)

Acute Toxicity, Oral - 4 Corrosion/Irritation, Skin - 3 (Corrosion)Damage/Irritation, Eye - 2A Specific Target Organ Toxicity (STOT)-Respiratory Irritation, Single exposure - 3

Environmental Hazard(s) Not classified.

Label Elements Signal Word WARNING

Hazard Symbol(s)



Hazard Statement(s)

H290: May be corrosive to metals. H302: Harmful if swallowed. H316: Causes mild skin Irritation. H319: Causes serious eye Irritation. H335: May cause respiratory Irritation. H336: May cause drowsiness or dizziness.

Precautionary Statements

General Not applicable.

Prevention

P234: Keep only in original container.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.



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P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P390: Absorb spillage to prevent material damage.

Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up. P406: Store in corrosive resistant container with a resistant inner liner.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Mixture

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Sodium Hydrogen Sulfite	Sodium Bisulfite	7631-90-5	>= 30 - < 50 %	No
Sodium Sulfite (Na ₂ SO ₃)	-	7757-83-7	<1	None
Sodium Sulfate (Na₂SO₄)	-	7757-82-6	<4	None

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.

2. Non-hazardous inaredients are not presented as to protect the proprietary formula of the product.

3. "--- "Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation

Move to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention if you feel unwell.

Skin Contact

Remove contaminated clothing and wash exposed area thoroughly with soap and water. Seek medical attention if you feel unwell.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Indestion

If swallowed, DO NOT induce vomiting. Rinse mouth seek medical attention if you feel unwell.

Most important symptoms/effects, acute and delayed

Symptoms

No data available.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

No data available.

Section 5: Fire-Fighting Measures

General Fire Hazards No data available.

Suitable (and Unsuitable) Extinguishing Media Suitable Extinguishing Media

Use extinguishing media appropriate for surrounding fire Unsuitable Extinguishing Media

No data available.



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Sodium oxides, Sulphur oxides, Sulphur oxides, Sodium oxides

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

Wear NIOSH approved self-contained breathing apparatus (SCBA). Use water spray to keep containers cool and to knock down fumes. CAUTION: when subject to excess heat, product releases additional sulfur dioxide gas.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Steps should be taken to contain spilled liquid and prevent discharges to streams or sewer systems.

Methods and Materials for Containment and Clean-Up

For spills, transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Absorb remaining liquid in sand or inert absorbent and remove to safe place.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Neutralizing Chemicals

Neutralize with appropriate alkali such as sodium hydroxide, or soda ash to neutral pH. Avoid conditions where the pH of spilled material is maintained at lower than pH 6, since sulfur dioxide can be released at ambient temperatures below this pH.

Environmental Precautions

Steps should be taken to contain spilled liquids and prevent discharges to streams or sewer systems.

Section 7: Handling and Storage

Precautions for Safe Handling

Handle all chemicals with respect. Keep separated from incompatible substances. Handle only with equipment materials and supplies specified by the manufacturer as being compatible and appropriate for use with this product.

Conditions for Safe Storage, including any Incompatibilities

Store at appropriate temperature to protect from freezing or crystallization. Consult the appropriate SII Product bulletin for temperature recommendations. Do not store this material near food, animal feed, or drinking water. Store in a well-ventilated area. Store away from excessive heat (e.g. steam pipes, radiators) and from reactive materials. Keep containers tightly closed when not in use.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits	iai Exposure Limits				
Chemical Identity	Туре	Value	Source		
Sodium Bisulfite	TWA	5 mg/m3	US. ACGIH Threshold Limit Values		

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit values.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Use chemical splash goggles and face shield. Eye protection worn must be compatible with respiratory protection system employed.

Skin Protection

Hand Protection

Chemical resistant gloves should be worn whenever this material is handled. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Other

Where splash is possible, full chemical resistant protective clothing and boots are required. Ensure that eyewash stations and safety showers are proximal to the work station location.

Respiratory Protection

None required under normal conditions. When conditions warrant a respirator, use NIOSH approved respirator and cartridge for particulates and Sulfur dioxide.

Hygiene Measures

Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or using the toilet.



Section 9: Physical and Chemical Properties

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Appearance:				
Physical State:	Liquid			
Color:	Clear to yellow			
Odor:	Pungent odor			
Odor Threshold:	No data available.			
pH:	3.5 to 5.0			
Melting Point/Freezing Point:	15.8°F/-9℃			
Specific Gravity: (H2O=1)	1.13 TO 1.38 @ 77°F/25°C			
Initial Boiling Point and Boiling Range:	217°F / 103 °C Estimated			
Flash Point:	Not applicable.			
Evaporation Rate (butylacetate=1):	No data available.			
Flammability (solid, gas):	No data available.			
Upper/Lower Limit on Flammability or Explosive Limits				
Flammability Limit – Upper:	No data available.			
Flammability Limit – Lower:	No data available.			
Explosive Limit – Upper:	No data available.			
Explosive Limit – Lower:	No data available.			
Vapor Pressure:	≤ 32 mm Hg total (12 mm Hg SO2) @ 77°F/25°C			
Vapor Density (air = 1):	Likewater			
Relative Density (water=1):	1.13 to 1.38 @ 77°F/25℃			
Solubility(ies):				
Solubility in water:	Dilutable			
Solubility (other):	No data available.			
Partition coefficient (n-octanol/water):	No data available.			
Auto-Ignition Temperature:	No data available.			
Decomposition Temperature:	No data available.			
Viscosity:	No data available.			
Weight per gallon (lbs.)	9.4 to 11.3 @ 77°F/25℃			
Other Information:				
Molecular Weight:	104.1			

NaHSO3

Molecular Weight: Formula:

Section 10: Stability and Reactivity

Reactivity

No data available.

Chemical Stability

Material is stable under normal conditions.

Possibility of Hazardous Reactions No data available.

Conditions to Avoid Avoid exposure to excessive heat.

Incompatible Materials

Strong acids and oxidizing agents

Hazardous Decomposition Products

Thermal decomposition may yield the following: sulfur dioxide – toxic fumes.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Skin Contact: Causes mild skin irritation.

Eye Contact: Causes serious eye irritation.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Sodium Bisulfite Solution: Rat 2000mg/kg, oral, LD50

Dermal

No data available.

Inhalation No data available.

Repeated Dose Toxicity No data available.



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Skin Corrosion/Irritation

No data available.

Serious Eye Damage/Eye Irritation

No data available.

Respiratory/Skin Sensitization No data available.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans *Group 3, Not classifiable as to its carcinogenicity to humans.*

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

No data available. In Vivo

No data available.

Reproductive Toxicity *No data available.*

no unu avanable.

Specific Target Organ Toxicity – Single Exposure

No data available.

Specific Target Organ Toxicity – Repeated Exposure No data available.

Aspiration Hazard

No data available.

Other Effects

No data available.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

Sodium Bisulfite Solution: Mosquitofish, 240ppm, 96 Hours, LC50

Aquatic Invertebrates No data available.

Toxicity to Aquatic Plants No data available.

Chronic Hazards to the Aquatic Environment

Fish No data available.

Aquatic Invertebrates No data available.

Toxicity to Aquatic Plants No data available.

Persistence and Degradability

Biodegradation No data available. BOD/COD Ratio No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF) No data available on bioaccumulation. Partition Coefficient n-octanol / water (log Kow) No data available.

Mobility in Soil No data available.



No data available.

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Section 13: Disposal Considerations

Disposal Instructions

Always dispose of material in accordance with local, state and federal regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

Section 14: Transportation Information

US Department of Transportation (DOT)

UN Number: UN2693 UN Proper Shipping Name: Bisulfites, Aqueous Solutions, n.o.s. (Contains Sodium Bisulfite) Technical Name: HazardClass: 8 Subsidiary Hazard Risk: Packing Group: III DOT Label/Placard Exemptions: Not determined Special Provisions: IB3, T7, TP1, TP28 Packaging Exceptions: 49CFR 173.154 Packaging Non-Bulk: 49CFR 173.203 Packaging Bulk: 49CFR 173.241 Reportable Quantity (RQ): 5,000lb(2270kg) Marine Pollutant: No Poison Inhalation Hazard: No 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.

Emergency Response Guidebook (ERG) #: 154

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listina.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

The following chemical(s) in this material are subject to reporting levels established by CERCLA:

Sodium Bisulfite (CAS# 7631-90-5)

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No Sudden Release of Pressure: No Reactive: No Acute (Immediate) Health Hazard: Yes

Chronic (Delayed) Health Hazard: No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information





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Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 1 Chronic Health Hazard: / Flammability: 0 Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 1 Fire Hazard: 0 Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate **BCF** - Bioconcentration Factor EC50 - Effective concentration, 50% IDHL – Immediately Dangerous to Life and Health Kg – Kilogram I – Liter lb – Pound LC50 - Lethal Concentration, 50% LD50 - Lethal Dose, 50% mg - milligram ml – milliliter N/A – Not Applicable N/D – Not Determined PEL – Permissible Exposure Limit REL – Recommended Exposure Limit STEL – Short-term Exposure Limit TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists AIHA – American Industrial Hygiene Association BEI - Biological Exposure Indices CAS – Chemical Abstracts Service DOT – US Department of Transportation EPA – US Environmental Protection Agency GHS - Globally Harmonized System of Classification and Labelling of Chemicals IARC - International Agency for Research on Cancer IATA - International Air Transport Association IBC - Intermediate Bulk Container IMDG - International Maritime Dangerous Goods NIOSH – National Institute for Occupational Safety and Health NTP – National Toxicology Program OSHA – US Occupational Health and Safety Administration SARA – US EPA Superfund Amendments and Reauthorization Act TSCA – US EPA Toxic Substances Control Act UN - United Nations

References

HSDB[®] - Hazardous Substances Data Bank

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