Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER	
Product name:	Sodium Bisulphite (SBS) ALL GRADES
Other Names:	Sodium Bisulphite, Aqueous Solution; Sodium Hydrogen Sulfite; Sodium disulfite; Sulfurous acid, monosodium salt; Sodium acid sulfite
Chemical formula:	$NaHSO_3$
Recommended Use:	Manufacturing of perfume, pharmaceuticals, photochemicals, bleaching agent, and papermaking
Company Identification: **Address:**	**Kemcore International Limited** **133 CONNAUGHT RD** **UNIT 703 ALLIANCE COMM BLDG,** **HONGKONG**
Customer Centre:	
Section 2: HAZARD IDENTIFICATION	
Emergency Overview:	Danger! Contains material, which causes damage to the following organs: mucous membranes, respiratory tract, skin, eye, lens or cornea. Incompatible with acids and oxidizers (acidification will liberate sulfur dioxide gas). Thermal decomposition products are corrosive and/or toxic and include oxides of sulfur.
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Routes of entry:	Eyes, skin, inhalation and ingestion.
Target organs:	Upper respiratory tract, skin, eyes
Skin contact:	Sodium bisulfite may cause symptoms of skin irritation such as reddening, swelling, rash, scaling or blistering.
Eye contact:	Vapors from this product are irritating to the eyes. This product

	causes irritation, redness, and pain. May cause burns if left untreated.
Inhalation:	Product is irritating to the nose, throat and respiratory tract.
Ingestion:	May cause allergic reaction in some asthmatics and sulfite sensitive persons. Ingestion of large amounts may cause nausea, gastrointestinal upset and abdominal pain. May cause central nervous system (CNS) depression, nausea and vomiting, diarrhea, violent colic and death.
Chronic Exposure:	Contains material that may cause target organ damage, based on animal data. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Explanation of carcinogenicity:	This product has not been classified as a carcinogen by OSHA, NTP, IARC.
Medical conditions aggravated by exposure:	Breathing of fumes may aggravate acute or chronic asthma and chronic pulmonary disease such as emphysema and bronchitis. May cause allergic reactions in sulphide sensitive individuals.

Section 3: Composition Information

INGREDIENT	**CAS No.**	**CONTENT**
Sodium Bisulphite	7631-90-5	99% or 32-40%
Water	7732-18-5	1% or 68-60%

Section 4: FIRST AID MEASURES

Inhalation:	Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Call a physician.
Ingestion: a	Induce vomiting by giving 2 glasses of water to drink and touching back of subject's throat with finger. IMMEDIATELY see a physician. Never give anything by mouth to an unconscious

	person.
Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get prompt medical attention. Wash contaminated clothing thoroughly before reuse.
Eye:	IMMEDIATELY flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention.
Advice to Doctor:	No specific treatment. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Section 5: FIREFIGHTING MEASURES	
Flash Point:	Not applicable.
Combustion Products:	Heating causes thermal decomposition, which liberates toxic fumes of sulfur dioxide, and corrosive fumes of nitrogen oxide and nitric acid. Reaction with some metals produces hydrogen gas.
Extinguishing Media:	For small fires use carbon dioxide or dry chemical. For large fires involving sodium bisulphite, flood fire area with water. Do not get the solid stream of water on spilled material.
Protestive Equipment:	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
HAZCHEM Code:	2R
Section 6: ACCIDENTAL RELEASE MEASURES	
Spills and Disposal:	Small spill: Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Large spill: Remove all ignition sources. Ventilate area. Use appropriate Personal Protection Equipment. Prevent liquid from entering sewers or waterways. Dike with inert material(sand, earth, etc.). Stop or reduce leak if safe to do so. Collect into containers for reclamation or disposal only if container is suitable

	to withstand the material. Consider *in situ* neutralization and disposal. Ensure adequate decontamination of tools and equipment following clean up. Comply with Federal, Provincial/State and local regulations on reporting releases.
Protective Clothing:	Use appropriate Personal Protection Equipment (see Section 8).
Environmental:	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).
Section 7: HANDLING AND STORAGE	
Handling:	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Storage:	Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Other Information:	
Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION	
Exposure Limits:	5 mg/m^3
Protective Equipment:	Impervious (i.e., neoprene, PVC, rubber) gloves, coveralls, boots and/or other acid resistant protective clothing. Tight-fitting chemical goggles and face shield. A NIOSH/MSHA approved air-purifying respirator equipped with acid gas/fume, dust, mist cartridges for concentrations up to $50mg/m^3$ or 20 ppm as sulfur dioxide. A powered air-purifying respirator with acid gas cartridges for up to 50 ppm sulfur dioxide. A full-face piece air-supplied respirator if concentrations are for up to and higher than 100 ppm sulfur dioxide. Where there is a danger of spilling or

	splashing, acid resistant aprons or suits should be worn. Trouser legs should be worn outside (not tucked in) rubber boots. Safety showers and eyewash fountains should be installed in storage and handling areas.
Engineering Controls:	Provide exhaust ventilation or other controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure the eyewash stations and safety showers are proximal to the workstation location.
Hygiene Precautions:	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.
Section 9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Clear, colorless to light yellow liquid
Odour:	Pungent. Sulfurous
Specific Gravity:	1.33
Bulk Density:	Not applicable.
pH:	3.8 to 5.2
Solubility in Water:	Miscible in all proportions in water
Flash Point:	Not applicable.
Melting Point:	6°C (42.8°F)
Other Information:	
Section 10: STABILITY AND REACTIVITY	
Stability:	Stable under normal conditions. Slowly evolves sulfur dioxide under ambient temperatures.

Hazardous Decomposition Products:	Sulfur dioxide released upon heating.
Conditions to Avoid:	High temperatures, sparks, open flames and all other sources of ignition. Temperatures at or near boiling point causes evolution of Sulfur dioxide.
Materials to Avoid:	Strong oxidizers may cause strong exothermic reaction, Lewis or mineral acids (acidification will liberate sulfur dioxide gas).
Section 11: TOXICOLOGICAL INFORMATION	
ERMA Classification:	6.1.D (oral), 6.1.E (dermal and inhalation), 6.3.A, 6.4.A, 6.5A (respiratory), 6.5B (contact)
Ingestion:	May be harmful if swallowed. May cause gastrointestinal tract irritation irritation with abdominal pain, nausea, vomiting, diarrhea, violent colic, and possible gastri hemorrhaging. May affect behavior/central nervous system and cause central nervous system depression/seizures. It may also affect the cardiovasular system (hypotension, tachycardia, cardiovascular collapse),
Inhalation:	May cause respiratory tract irritation with coughing and wheezing
Skin:	May cause skin irritation.
Eye:	May cause eye irritation
Chronic Effects:	May affect genetic material (mutagenic) based on animal test data. May cause adverse reproductive effects based on animal test data.
Other Information:	
Section 12: ECOLOGICAL INFORMATION	
ERMA Classification:	9.3C

Ecotoxicity:	Harmful to aquatic life in low concentrations.
Section 13: DISPOSAL INFORMATION	
Product Disposal::	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.
Container Disposal:	Dispose in accordance with all federal, provincial, and/or local regulations.
Section 14: TRANSPORT INFORMATION	
UN Number:	2693
Proper Shipping Name:	Bisulfites, inorganic, aqueous solutions, n.o.s. (Sodium Bisulfite)
DG Class:	8
UN Packing Group:	III
Other Information:	
Section 15: REGULATORY INFORMATION	
Federal and State Regulations: Connecticut hazardous material survey.: Sodium bisulfite Illinois toxic substances disclosure to employee act: Sodium bisulfite Illinois chemical safety act: Sodium bisulfite New York release reporting list: Sodium bisulfite Pennsylvania RTK: Sodium bisulfite Minnesota: Sodium bisulfite Massachusetts RTK: Sodium bisulfite Massachusetts spill list: Sodium bisulfite New Jersey: Sodium bisulfite New Jersey spill list: Sodium bisulfite Louisiana spill reporting: Sodium bisulfite California Director's List of Hazardous Substances: Sodium bisulfite TSCA 8(b) inventory: Sodium bisulfite TSCA 8(a) PAIR: Sodium bisulfite TSCA 8(d) H and S data reporting: Sodium bisulfite: Effective date: 1/26/94; Sunset date: 6/30/98 CERCLA:	

Hazardous substances.: Sodium bisulfite: 5000 lbs. (2268 kg)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC): R22- Harmful if swallowed. R31- Contact with acids liberates toxic gas. S25- Avoid contact with eyes. S46- If swallowed, seek medical advice immediately and show this container or label.

Section 16: OTHER INFORMATION