



CALLE 4 No. 2734 ZONA INDUSTRIAL
TELS. 38-45-76-84, 36-45-73-18, 36-45-70-05
38-10-12-61 FAX. 38-10-24-91
CP. 44840 GUADALAJARA, JAL.

AQUAVITE

MATERIAL SAFETY DATA SHEET

Aquavit Acidifier

1.- GENERAL INFORMATION

COMPANY'S NAME: Demet S.A de C.V
CITY: Guadalajara, Jal. México

COMPANY'S STREET: Calle 4 No. 2734 Zona Industrial
COMPANY'S EMERG. PH: (33) 36457005, 36457318, 36457684

NOTE: Emergency numbers should be used only in cases of chemical emergencies involving spills, fire or chemical accidents. All the not emergent questions will have to go to clients' service.

Emitted 25/05/2005
Revised: 17/05/2006

2.- INGREDIENTS / IDENTITY INFORMATION

INGREDIENTS:	OSHA/PEL	ACGIH/TLV	%	CAS No
Sodium Bisulfate			88.14	7881-38-1
Cupric Sulfate Pentahydrate	1.0* mg/M ³	1.0* mg/M ³	11.86	7758-99-8

SODIUM BISULFATE

UN: #1821
Class: 8

SYNONYMS: Sodium hydrogen sulphate, bisulfate of soda

CHEMICAL FAMILY: Compounds of sodium

MOLECULAR FORMULA: NaHSO₄

MOLECULAR WEIGHT: 120 gr/mol



CUPRIC SULFATE

UN: #3077

Class: 9

SYNONYMS: Copper Sulfate Pentahydrate (II), Blue Vitriol

CHEMICAL FAMILY: Compounds of copper

MOLECULAR FORMULA: $\text{Cu}_2\text{SO}_4 \cdot 5\text{H}_2\text{O}$

MOLECULAR WEIGHT: 249.68

3.- PHYSICAL / CHEMICAL CHARACTERISTICS

FLAMMABILITY: Material is non-combustible

VAPOR PRESSURE (mmHg): N/A

SOLUBILITY IN WATER: 1080 g/l (68°F (20°C))

APPEARANCE AND ODOR: White-blue granular material, odor fresh.

MELTING POINT: H_2O a 110°C, decomposes 350°F

BULK DENSITY: 80 - 85 lbs/ft³

4.- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable will not burn

LIMITS EXPLOSIVES: UPPER: Not applicable LOWER: Not applicable

EXTINGUISHING MEDIA: Water or dry chemical as appropriate for combustibles in area. Avoid water contact to material if possible, because will readily dissolve in water to form a weak acid solution.

HAZARDOUS COMBUSTION PRODUCTS: At temperatures over 808°F (430°C), product will decompose generating oxides of sulphur.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product readily dissolves in water to form a weak sulphuric acid solution. No gases or toxic fumes are emitted from this reaction, but precautions for exposure to sulphuric acid should be followed. Temperature up of 600°C will decompose in copper oxide and sulphur dioxide.

5.- REACTIVITY DATA

STABILITY: Stable

CONDITION TO AVOID: Excessive Heat, exposure to incompatible materials. Store in dry area to avoid moisture contact.

INCOMPATIBLES: Contact with metal of magnesium can generate dangerous levels of gas hydrogen. Avoid contact with alkaline material such as caustic.

PRECAUTIONS WITH SECONDARY PRODUCTS: Up to 430°C, can develop sulphur dioxide.

None in process of normal temperature.

PRECAUTIONS OF HAZARDOUS REACTIONS: Will not occur.

6.- HEALTH HAZARD DATA AND FIRST AID MEASURES

LD50-LC50 Mixture: ORAL LD50, RAT: 960MG/KG

ROUTES OF ENTRY

1.-INHALATION: May irritate or burn nose, throat and lunge, Move to the fresh air, administer cpr, if it is needed, apply oxygen.

2.-EYE CONTACT: Causes mild to severe Irritation, wash with big quantities of water for 15 min. Keep the eyelids opened during the wash.

3.-SKIN CONTACT: Wash with big quantities of water for 5 min. Remove the contaminated clothes.

4.-INGESTION: May cause burning pain In mouth/esophagus/stomach. Do not Induce vomit.

Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO

MANIFESTATION OF SIGNS AND SYMPTOMS: itch, irritation of eyes, soreness and nasal symptoms can happen, repetition or long contact of skin can cause dermatitis. Cough, difficulty to breathe, reddening of the skin (leather).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY BE EXPOSING: The disease of Wilson's or deficiencies G6PD (individual absorptions, retention or storage of Excess of copper) symptoms can include nauseas, vomit, gastric pain, diarrhoea, motion sicknesses.

PROCEDURE OF EMERGENCIES AND THE FIRST AIDS: Treat the urgent symptoms
First: Difficulty of breathing, irritation of eyes, shock, contact with the skin. In all the cases
Look for medical assistance

7.- PRECAUTIONS FOR SAFE HANDLING AND USE

PRECAUTIONS THAT MUST BE TAKEN TO HANDLE AND STORE: Store in containers closed in a dry place, because part of material is hygroscopic, area well ventilated far from heat sources and reducer agents.

OTHER PRECAUTIONS: Avoid breathing the powder sprayed with solution, implement controls (Own) of engineering and administration and / or use personal protection equipment to control humans under the limits of applicable exhibition.

STEPS TO CONTINUING IN CASE THE MATERIAL SHOULD BE SPILLED OR FREED: Sweep the crystals or the powder, to aspire is preferable, to reject for a method approved for local authorities.

8.- CONTROL MEASURES

RESPIRATORY PROTECTION (TYPE SPECIFIES) respiratory mask approved for dew and toxic powder.

PROTECTIVE GLOVES: Yes. Rubber, plastic gloves.

PROTECTION OF EYES: Chemical goggles where there are possible splashes.

Other Protective Equipment: Body-covering clothing, eye wash fountain, quick-drench facilities in work area.

8.- TRANSPORTATION DATA

Shipment in the United States of America (DOT): Not Regulated

IMPORTANTLY: The information here present is true and correct. The managing and use of this product are under the risk of the consumer.