

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation

Stop solution

of the mixture

Registration number

Stop Solution in 602; in 603; in 634; in 635; in 842; in 873 **Synonyms** 

**Product code** 602, 603, 634, 635, 842, 873

01-December-2017 Issue date

02 Version number

**Revision date** 13-July-2017 Supersedes date 07-October-2016

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Assorted.

Uses advised against Use in accordance with supplier's recommendations.

1.3. Details of the supplier of the safety data sheet

**Corporate Headquarters** BioMedica Diagnostics Inc.

94 Wentworth Road, PO Box 1030

Windsor, Nova Scotia CANADA B0N 2T0

Corporate Phone: 1-902-798-5105 Contact person

Corporate Fax: 1-902-798-1025 Email: info@biomedicadiagnostics.com Website: www.biomedicadiagnostics.com

1.4. Emergency telephone

number

US, Canada, Puerto Rico & Virgin Islands 1-800-255-3924

International +1-813-248-0585 Australia 1-300-954-583

Brazil 0-800-591-6042 China 400-120-0751 India 000-800-100-4086 Mexico 01-800-099-0731

Contract number MIS9591327

### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

**Physical hazards** 

Corrosive to metals Category 1 H290 - May be corrosive to metals.

May be corrosive to metals. Not classified for health hazards. However, occupational exposure to **Hazard summary** 

the mixture or substance(s) may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms

Signal word Warning

**Hazard statements** 

May be corrosive to metals. H290

**Precautionary statements** 

Prevention

Stop solution 1/8

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Keep only in original container. P234

Response

Absorb spillage to prevent material damage. P390

Storage

Store in corrosive resistant container with a resistant inner liner. P406

Disposal Not assigned.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

**General information** 

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Sulfuric acid	< 5	7664-93-9 231-639-5	-	016-020-00-8	#
Classification:	Met. Corr. 1;H290, Skin Corr. 1A;H314, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Chronic 3;H412				В

### List of abbreviations and symbols that may be used above

#: This substance has been assigned Community workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in Composition comments

percent by volume. The full text for all H-statements is displayed in section 16.

### **SECTION 4: First aid measures**

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. If you feel unwell, seek medical advice (show the label where possible).

4.1. Description of first aid measures

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON Inhalation

CENTRE or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove Eye contact

contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation

develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and

delayed

4.3. Indication of any

immediate medical attention and special treatment needed Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May

cause redness and pain.

Provide general supportive measures and treat symptomatically.

### **SECTION 5: Firefighting measures**

General fire hazards Not flammable, but reacts with most metals to form flammable hydrogen gas.

5.1. Extinguishing media

Suitable extinguishing

media

Use extinguishing agent suitable for type of surrounding fire.

Unsuitable extinguishing

media

None known.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special fire fighting

Special protective equipment for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in

procedures

Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

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### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Local authorities should be advised if significant spillages cannot be contained. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Stay upwind. Avoid any exposure. Use personal protection recommended in Section 8 of the SDS.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the

SDS.

6.2. Environmental precautions

Do not contaminate water.

6.3. Methods and material for containment and cleaning up Should not be released into the environment. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Large Spills: Dike far ahead of liquid spill for later disposal. Absorb spillage with suitable absorbent material. Ventilate the area. Collect in containers and seal securely. Flush with plenty of water to clean spillage area.

Small Spills: Absorb spill with vermiculite or other inert material. Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water.

Never return spills in original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

# **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid prolonged exposure. Avoid inhalation of vapors and contact with skin, eyes and clothing. Handle and open container with care. Use only with adequate ventilation. Wash thoroughly after handling. Use personal protection as recommended in Section 8 of the SDS.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a well-ventilated place. Keep this material away from food, drink and animal feed. Keep out of the reach of children. Use care in handling/storage.

7.3. Specific end use(s) Assorted.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Occupational exposure limits

**UK. EH40 Workplace Exposure Limits (WELs)** 

Components	Туре	Value	
Sulfuric acid (CAS	TWA	0.05 mg/m3	
7664-93-9)			

### EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Туре	Value	Form	
Sulfuric acid (CAS 7664-93-9)	TWA	0.05 mg/m3	Mist.	

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

Not available.

Predicted no effect

Not available.

concentrations (PNECs)

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Provide easy access to water supply and eye wash facilities.

## Individual protection measures, such as personal protective equipment

**General information** Personal protective equipment should be chosen according to the CEN standards and in

discussion with the supplier of the personal protective equipment.

Eye/face protection Wear approved safety glasses or goggles.

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves.

Frequent change is advisable.

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- Other Wear appropriate chemical resistant clothing.

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory Respiratory protection

equipment.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

Hygiene measures Handle in accordance with good industrial hygiene and safety practices.

**Environmental exposure** 

controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

**Appearance** 

Liquid. Physical state Liquid. **Form** Colour Colourless. Odour Not available. **Odour threshold** Not available. Not available. Ηq Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit - lower Not available.

(%)

Not available.

Flammability limit - upper

(%)

Not available. Vapour pressure Not available. Vapour density Relative density Not available. No data available. Solubility(ies) Partition coefficient

(n-octanol/water)

No data available.

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available. Not available. **Explosive properties** Not available. **Oxidising properties** 

9.2. Other information No relevant additional information available.

### **SECTION 10: Stability and reactivity**

10.1. Reactivity Stable at normal conditions.

Material is stable under normal conditions. 10.2. Chemical stability

10.3. Possibility of hazardous

reactions

May be corrosive to metals.

10.4. Conditions to avoid Excessive heat.

10.5. Incompatible materials Potassium chlorate. Bases. Organic material. Halogens. Metals. Strong oxidising agents.

Reducing Agents.

10.6. Hazardous Sulphur oxides. Produces toxic fumes.

decomposition products

# **SECTION 11: Toxicological information**

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Vapours may irritate throat and respiratory system and cause coughing.

Skin contact No data available.

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No data available. Eye contact

May cause discomfort if swallowed. Ingestion

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May Symptoms

cause redness and pain.

11.1. Information on toxicological effects

**Acute toxicity** May cause discomfort if swallowed.

Components **Species Test results** 

Sulfuric acid (CAS 7664-93-9)

Acute Oral

LD50 Rat 2140 mg/kg

No data available. Skin corrosion/irritation No data available. Serious eye damage/eye

irritation

Not classified. Respiratory sensitisation

Not a skin sensitiser. Skin sensitisation

Not classified. Germ cell mutagenicity

Carcinogenicity Not classifiable as to carcinogenicity to humans.

Not classified. Reproductive toxicity Not classified. Specific target organ toxicity single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** Not classified. Mixture versus substance

information

Not available.

Other information No other specific acute or chronic health impact noted.

**SECTION 12: Ecological information** 

No toxicity data noted for the ingredient(s). 12.1. Toxicity

12.2. Persistence and

degradability

The product is not biodegradable.

12.3. Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No data available.

n-octanol/water (log Kow)

**Bioconcentration factor (BCF)** Not available. 12.4. Mobility in soil No data available.

Mobility in general The product is water soluble and may spread in water systems.

12.5. Results of PBT

and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic

organisms.

**SECTION 13: Disposal considerations** 

13.1. Waste treatment methods

Residual waste Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Dispose of in accordance with local regulations.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Dispose of this material and its container to hazardous or special waste collection point. Do not

allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable

**SECTION 14: Transport information** 

**ADR** 

14.1. UN number UN3264

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```
Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid)
    14.2. UN proper shipping
    name
    14.3. Transport hazard class(es)
        Class
                                  8
        Subsidiary risk
                                  8
        Label(s)
                                  80
        Hazard No. (ADR)
                                 Ε
        Tunnel restriction code
                                  Ш
    14.4. Packing group
    14.5. Environmental hazards No.
    14.6. Special precautions
                                  Read safety instructions, SDS and emergency procedures before handling.
    for user
RID
                                  UN3264
    14.1. UN number
                                  Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid)
    14.2. UN proper shipping
    name
    14.3. Transport hazard class(es)
                                  8
        Class
        Subsidiary risk
                                  8
        Label(s)
                                  Ш
    14.4. Packing group
    14.5. Environmental hazards No.
                                  Read safety instructions, SDS and emergency procedures before handling.
    14.6. Special precautions
    for user
ADN
    14.1. UN number
                                  UN3264
    14.2. UN proper shipping
                                  Corrosive Liquid, Inorganic, N.o.s. (Sulfuric acid)
    name
    14.3. Transport hazard class(es)
                                  8
        Class
        Subsidiary risk
                                  8
        Label(s)
                                  Ш
    14.4. Packing group
    14.5. Environmental hazards No.
    14.6. Special precautions
                                  Read safety instructions, SDS and emergency procedures before handling.
    for user
IATA
                                  UN3264
    14.1. UN number
                                  Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid)
    14.2. UN proper shipping
    name
    14.3. Transport hazard class(es)
        Class
                                  8
        Subsidiary risk
    14.4. Packing group
                                  Ш
    14.5. Environmental hazards No.
    ERG Code
                                  Read safety instructions, SDS and emergency procedures before handling.
    14.6. Special precautions
    for user
IMDG
    14.1. UN number
                                  UN3264
                                  CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid)
    14.2. UN proper shipping
    14.3. Transport hazard class(es)
                                  8
        Class
        Subsidiary risk
                                  8
        Label(s)
                                  Ш
    14.4. Packing group
    14.5. Environmental hazards
        Marine pollutant
                                  No.
    EmS
    14.6. Special precautions
                                  Read safety instructions, SDS and emergency procedures before handling.
    for user
```

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14.7. Transport in bulk

Not established.

according to Annex II of Marpol

and the IBC Code

## **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### **EU regulations**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

#### **Authorisations**

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended Not listed.

#### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

## Other EU regulations

### Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Sulfuric acid (CAS 7664-93-9)

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Other regulations

Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended.

**National regulations** The product has been classified according to the legislation in force.

No Chemical Safety Assessment has been carried out. 15.2. Chemical safety

assessment

## **SECTION 16: Other information**

## List of abbreviations

DNEL: Derived No-Effect Level.

PNEC: Predicted No-Effect Concentration. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative.

LD50: Lethal Dose, 50%. TWA: Time weighted average. PEL: Permissible Exposure Limit.

References Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under

Sections 2 to 15 H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

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Training information Disclaimer

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Follow training instructions when handling this material.

The information above is provided in good faith. It is believed to be accurate and represents the best information currently available to us. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER TYPE, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS DESCRIBED OR DATA OR INFORMATION PROVIDED, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OF SUCH PRODUCTS, DATA OR INFORMATION. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. In no event shall BioMedica Diagnostics be liable for any claims, losses, or damages of any individual or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if BioMedica Diagnostics has been advised of the possibility of such damages.

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