

Via Laurentina 169

00040 POMEZIA (RM)

# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb
IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 1/6

Edited in accordance with attachment II of the Regulation N. 1907/2006 of the European Parliament and Committee (Official European Journal L 136/84 dated 29.05.2007)

## 1. IDENTIFICATION OF SUBSTANCE OR PRODUCT AND COMPANY/MANUFACTURER

| 1.1 | Identification of product | ADASPOR® SINGLE SHOT Chemical denomination: water solution of adazone and peracetic acid Medical Device classification: class IIb - Directive 2007/47/EC |  |
|-----|---------------------------|--|--|
| 1.2 | Use of the product        | Cold Chemical sterilant solution for Medical Devices   |  |
| 1.3 | Company identification    | IMS srl - Via Laurentina, n. 169 – 00040 Pomezia (RM), Italy   |  |
| 1.4 | Emergency phone           | Italy: +39 - 06/9145399  |  |

## 2. HAZARD IDENTIFICATION

| 2.1   | Classification of dangerousness | End product is not classifiable as dangerous product   |  |
|-------|---------------------------------|--|--|
| 2.2   | Classification of ingredients   | The active ingredient peracetic acid is a dangerous product.   |  |
| 2.3   | Hazard identification           | <b>Solution A</b> (containing peracetic acid at 5%) is corrosive and comburent. <b>The product, activated and diluted and Solution B</b> (containing Adazone and coformulants) do not show hazard indications on the label |  |
| 2.3.1 | Ingestion                       | Solution A is noxious for ingestion  |  |
| 2.3.2 | Skin contact                    | Solution A is noxious for contact with skin Solution A can cause sensitisation   |  |
| 2.3.3 | Eye contact                     | Solution A is noxious if in contact with eyes  |  |
| 2.3.4 | Inhalation                      | Solution A is noxious for inhalation   |  |
| 2.3.5 | Effects on targeted organs      |  |  |
| 2.3.6 | Effects on sexual reproduction  | /////  |  |
| 2.3.7 | Mutagenic effects               | /////  |  |
| 2.3.8 | Sensitization                   | End product doesn't cause sensitisation  |  |
| 2.4   | Warnings                        | End product should be handled by qualified personnel with appropriated safety rules.   |  |



# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 2/6

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

The product is made up by two tanks, each one holding 10 or 5 liters, indicated as solution A and solution B.

The Solution A tank is homologated UN 3H1/Y1.9/20(\*) – B/EM-020166 (\* last two digits represent manufacturing year)

| SOLUTION | INGREDIENTS/CONTENT   | NO. CAS     | RATE   | CLASSIFICATION | RISK PHRASES        |
|----------|---|-------------|--------|----------------|---------------------|
| Α        | Peracetic acid  | 79-21-0     | 4-6    | O-C            | 7-10-20/21/22-35-50 |
|          | Hydrogen peroxyde   | 7722-84-1   | 20 -30 | O- C           | 8-34                |
|          | Acetic acid   | 64-19-7     | 6 - 10 | O-C            | 10-35               |
| В        | Adazone   | 263768-83-8 | <1     | ///            | ///                 |
|          | Coformulants (stabilisers,buffers, anticorrosives) and purified water | ///         |        | ///            | ///                 |

## 4. FIRST AID MEASURES

| 4.1 | Skin       | Wash immediately with plenty of water.  |  |
|-----|------------|---|--|
| 4.2 | Eyes       | Wash immediately with plenty of water for at least 10 minutes and call immediately a physician    |  |
|     | -          | specialist.   |  |
| 4.3 | Ingestion  | Drink water in small quantities (dilution effect), but do not induce vomiting. Do not give active |  |
|     | _          | coal, danger of hydrogen peroxide release   |  |
| 4.4 | Inhalation | Go outdoors and breath deeply.  |  |

## 5. FIRE PREVENTION MEASURES

| 5.1 | Extinction means                                    | Water, foam, chemical powders, carbon dioxide        |
|-----|---|--|
| 5.2 | Extinction means to avoid                           | Organic compounds                                    |
| 5.3 | Exposure risks from combustion and/or developed gas | Pay attention to irritating vapours of acetic acid   |
| 5.4 | Special equipment for fire extinguishment           | Protect the respiratory ways. Use visors and gloves. |

## 6. MEASURES IN CASE OF ACCIDENTAL SPILLAGE

| 6.1 | Individual caution  | Use gloves and protective clothes. Protect eyes.   |
|-----|---------------------|--|
| 6.2 | Environment caution | In case of accidental spillage, the product resulting from mixing both solutions presents no toxicity issues. In case of spillage of Solution A alone, make sure it doesn't reach water courses, surface water and earth |
| 6.3 | Drainage method     | In case of spillage absorb with inert materials (diatomite, universal absorbing), pick up and dispose of safely. Clean the contaminated surfaces with water.   |
| 6.4 | Other suggestions   | Spilled product should not be poured in the original flask/tank for its reuse ( decomposition hazard )   |



# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb
IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 3/6

## 7. HANDLING AND STORAGE

| 7.1 | Handling       | Avoid contact with skin, eyes and clothing. Do not breathe vapours. Use under good     |  |
|-----|----------------|--|--|
|     | -              | industrial hygene norms and adequate e safety measures.                                |  |
| 7.2 | Storage        | Store in a dry and ventilated place, away from heating source and flammable            |  |
|     | _              | substances.  |  |
| 7.3 | Approved usage | Should be used in Automated Endoscope Reprocessors ( Medivators if single shot         |  |
|     |                | generetor is present ).  |  |
|     |                | Solution A has to be handled by trained personnel following the safety norms indicated |  |
|     |                | at point 8   |  |

## 8. INDIVIDUAL PROTECTION AND EXPOSURE CONTROL

| 8.1     | Exposure limits<br>Solution A | Peracetic acid: TLV-TWA = 25 mg/mc (10 ppm) - TLV-STEL = 37 mg/mc (15 ppm). Mean olfactory threshold: 24,3 ppm Hydrogen peroxide: TLV-TWA = 1 ppm  |
|---------|-------------------------------|--|
|         | Solution B                    |  |
| 8.2     | Exposure control              |  |
| 8.2.1   | Professional exposure control | While handling solution A use protective clothes and follow the industrial hygiene and safety norms.  While handling solution B no particular precautions is required.  For the diluted, activated and ready to use product, no particular precautions are required. |
| 8.2.1 a | Respiratory protection        | In case of emergency use a mask for acid vapours with filter (A2B2E2K1P2)  |
| 8.2.1 b | Hands protection              | Protective gloves (neoprene or rubber)   |
| 8.2.1 c | Eyes protection               | Safety glasses or glasses anti-spray with mask and visor   |
| 8.2.1 d | Skin protection               | Use acid resistant clothes (PVC, Neoprene, NBR, rubber) to protect the skin  |
| 8.3     | Environment exposure control  |  |

Normal safety precautions should be observed during the mixing, opening and closing of the tray containing the solution. Exposure studies have shown that the environmental concentrations of peracetic acid are less than one half of the TLV TWA threshold the should for several minutes at a distance of one meter from the open tray/tank.

## 9. CHEMICAL AND PHYSICAL PROPERTIES

| 9.1                                       | General Informations           | Solution A                          | Solution B          | Solutions<br>A + B           |
|---|--------------------------------|-------------------------------------|---------------------|------------------------------|
| Appea                                     | rance                          | Clear liquid                        | Clear liquid        | Clear liquid                 |
| Coloui                                    | •                              | Clear                               | Clear               | Clear and/or slightly yellow |
| Odour                                     |                                | Pungent                             | Slightly alcohol    | Pungent                      |
| 9.2                                       | Important informations concern | nining health, safety a             | and the environment |                              |
| рН  |                                | $0,5 \pm 0,5$                       | 12,5 ± 1            | 6,0 ± 1,0                    |
| Boiling                                   | point                          | not applicable                      | > 100℃              | > 100°C                      |
| Flash point                               |                                | > 96                                | > 100℃              | > 100 <i>°</i> C             |
| Explosive properties                      |                                | No data                             | No data             | No data                      |
| Combustion properties                     |                                | YES                                 | NO                  | NO                           |
| Vapour Pressure                           |                                | 27 mbar                             | not calculated      | not calculated               |
| Relative density                          |                                | nsity $1,12 \pm 0,2 \text{ g/cm}^3$ |                     | $1,0 \pm 0,2$                |
| Solubility in water at 25℃.               |                                | Complete                            | Complete            | Complete                     |
| Distribution coefficient: n-octanol/water |                                | log Pow – 1,25                      | not calculated      | not calculated               |
| Viscosity                                 |                                | not calculated                      | 30 ± 10 cP          | $3.0 \pm 1.0 \text{ cP}$     |



# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb
IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 4/6

#### 10. STABILITY AND REACTIVITY

| 10.1 | Conditions to avoid           | Avoid direct sunlight and heat.  |
|------|-------------------------------|--|
| 10.2 | Materials to avoid            | Solution A: Avoid contact with products flammables, organic solvents, metals, aluminium, zinc.   |
| 10.3 | Decomposition hazard products | Acetic acid and oxygen. Danger of over pressure increase in case of decomposition  |
| 10.4 | Incompatibility               | If used according to instructions, the product is compatible with all common components of which instruments are constituted. Simultaneous use of other medical devices is not envisaged. Anyway, contact with oxidant (eg. Chloro-derivatives) or reducing agents (eg. Aldehydes) is to avoid. Both solution A and B contain stabilizers. The dilution in water does not cause an exothermic reaction and the products formed by degradation are easily eliminated. |

### 11. TOXICOLOGICAL INFORMATION

| 11.1 | Acute toxicity     | Solution A DL <sub>50</sub> oral on rats: 1540 mg/kg DL <sub>50</sub> cutaneous on rats: 1410 mg/kg Inhalation ( $CL_{50}$ ): 450 mg/m <sup>3</sup> |  |
|------|--------------------|---|--|
| 11.2 | Primary irritation | DL <sub>50</sub> cutaneous on rats: 1410 mg/kg  |  |
| 11.3 | Ingestion          | Nausea and vomit, if ingested   |  |

#### Solution B

The composition does not require any precautions other than not ingesting and avoiding direct prolonged contact. Orally administrated Adazone, one of the formulation ingredients, is part of a pharmacological group of substances which can be in a medium dose of 100 mg, 1 or 2 times daily. For these substances no toxicity value has been established for skin contact.

#### Solution A + B

The local tolerance of Adaspor following single and repeated dermal administration to both abraded and intact skin was investigated in rabbits over a period of up to 7 days.

No irritation (erythema or oedema) was observed at treated sites (intact or abraded) following either the single 6 hours exposure to 1 ml of test product per contact site or the 7 days repeated dose with 0,5 ml of Adaspor.

No indications of a systemic effect (clinical signs) of the test item were observed during the treatment period.

On the basis of these results, the Adaspor is considered to be well tolerated following single and repeated applications to the skin of rabbits over a period of up to 7 days, due to no evidence of there being no reaction in any animal observed at treated sites.

NOEL (No Observed Effect Level) 2000 mg/Kg



# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb
IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 5/6

### 12. ENVIRONMENTAL INFORMATION

| 12.1 | Ecotoxicity                   | Toxicity on IC50 selenatrum capricornutum: ca 0.18 mg/l/120h. NOEC selenatrum capricornutum: ca 0.12 mg/l/120h.  |
|------|-------------------------------|--|
| 12.2 | Mobility                      | In case of accidental spillage, the product resulting from mixing both solutions presents no toxicity issues. In case of spillage of Solution A alone, make sure it doesn't reach water courses, surface water and earth |
| 12.3 | Persistence and degradability | Both solutions A and B have a biodegradability grade of over 99%. Evaluation: high degradability Testing method: closed bottle test Analysis method: COD determination Behaviour in biological plants: 99% biodegradable |
| 12.4 | Bio-accumulation potential    | No component has a bio-accumulation potential  |
| 12.5 | Others adverse effects        | Not known.   |

## 13. DISPOSAL

| 13.1 | Product disposal                | As a disinfectant is considered a special waste (toxic) it therefore requires disposal under the existing legislation.  Behaviour in biological systems: the exhausted solution is biodegradable.  Class of hazard to water: WGK: 2 (classified according to German legislation). |
|------|---------------------------------|---|
| 13.2 | Disposal of bottles and packing | After a thorough rinsing, bottles can either be recycled or disposed of as urban waste. Anyway, do not dispose of in the environment after use  |

# 14. TRANSPORT INFORMATIONS

Directions for transport and storage apply to the product being correctly stored, as indicated for any disinfectant. Transport by air, by sea and by road has to be carry out in respect of national and international legislation in force.

| Proper shipping name | HYDROGEN PEROXIDE AND PEROXYACETIC, MIXTURE, STABILIZED                          |
|----------------------|--|
| Air transportation   | UN 3149 - Class 5.1 - Packing group II   |
| Sea transportation   | UN 3149 - HYDROGEN PEROXIDE AND PEROXYACETIC, MIXTURE, STABILIZED 5.1 (8), PG II |
| Road transportation  | UN 3149 - HYDROGEN PEROXIDE AND PEROXYACETIC, MIXTURE, STABILIZED 5.1 (8), II    |

## 15. INFORMATION ON REGULATORY AND LABELING

| National prescription | Follow the National directives/regulations   |
|-----------------------|--|
| S                     |  |
| Labelling             | Under directive CEE (91/155/CEE, 67/548/CEE and succ.mod. D.L. 65 dated 14/03/03 and further integrations. |

# Solution A (Peracetic acid 5%)



# Safety Data Sheet ADASPOR® SINGLE SHOT

MEDICAL DEVICE class IIb IDENTIFICATION CODE ADA/CE/27

Ed. 1 Rev. 5 on: 27.10.2010 Page 6/6

| Symbols            | Comburent (C)                         | Corrosive (C)  |
|--------------------|---------------------------------------|--|
| (R) Risk phrases   |                                       | e - (20/21/22) Harmful by inhalation, it in contact with skin and if Causes burns (36/37/38) Irritating to eyes, respiratory system and  |
| (S) Safety phrases | rinse immediately suitable protective | retrightly closed in a cool place. (26) In case of contact with eyes, with plenty of water and seek medical advice. (36/37/39) Wear clothing, gloves and eye/face protection. (45) In case of accident well, seek medical advice immediately (show the label where |

| Solution B         |  |  |
|--------------------|--|--|
| Symbols            | Irritant (Xi)  |  |
| (R) Risk phrases   | (43) May cause irritation in contact with skin.  |  |
| (S) Safety phrases | (26) In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.   |  |
| Notices            | Product should be handled by qualified personnel following appropriate safety norms. Keep the recipient close in a dry place and away from heat.  Expiry date refers to intact product, correctly stored. Do not use after expiry date.  After use, exhaust solutions have to be dispose under the existing legislation. Do not dispose the containers in environment after use. |  |

PATENTS: Italy no. 01306711 - Europe no. 830229.1- 2101 - US no. 6,432,356 B1

### 16. OTHER INFORMATION

This safety data sheet has been compiled exclusively for storage, and transportation and safety use of the product. This sheet illustrates the procedures to follow in case of accidental spillage of solutions. It is recommended to follow the label and/or the instructions sheet. Any other use of the product in combination with other processes is at users own risk and peril.

The information contained herewith are based on present knowledge, characterising the product with reference to the appropriate safety precautions.

| Ed. | Rev. | Date       | STATE AND REVISION MOTIVATION           |
|-----|------|------------|---|
| 1   | 0    | 08.01.2004 | First release                           |
| 1   | 1    | 26.02.2007 | Update to new norms                     |
| 1   | 2    | 25.09.2008 | Update to peracetic acid specifications |
| 1   | 3    | 05.03.2010 | Compliance to EU Directive 2007/47/EC   |
| 1   | 4    | 05.03.2010 | Inactive ingredient elimination ( CMK ) |
| 1   | 5    | 27.10.2010 | Data upgrade                            |

THIS DOCUMENT MAY UNDERGO REVISIONS FOR IMPROVEMENTS, PRESCRIPTIVE AND LEGISLATIVE EVOLUTIONS OR ELSE. IT IS ADVISABLE TO CONTACT IMS PERIODICALLY TO CHECK THE STATE OF ITS VALIDITY OR TO VISIT OUR WEBSITE: WWW.IMSONLINE.IT