

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 24.05.2010

version number 1

Revision: 24.05.2010

1 Identification of the substance/preparation and of the company/undertaking

*Trade name: **CAESIUM AAS STANDARD SOLUTION**

*Article number: AACSM

*Application of the substance / the preparation Laboratory chemicals

*Manufacturer/Supplier:

Reagecon Diagnostics Ltd.
Shannon Free Zone,
Shannon,
Co. Clare,
IRL.

Tel +353 61 472622

Fax +353 61 472642

*Further information obtainable by contacting:

sds@reagecon.ie

EMERGENCY CONTACT NUMBER AVAILABLE 08.00 to 22.00 :- 353-87-9518207

email: sds@reagecon.ie

2 Hazards identification

*Hazard description:



C Corrosive
O oxidising

*Information concerning to particular hazards to man and environment:

The product has been classified and labelled in accordance with EU Directive 99/45/EC and all other EU Directives referred to therein.

R 8 Contact with combustible material may cause fire.

R 34 Causes burns.

*Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

*GHS label elements



Danger

H272 - May intensify fire; oxidiser.



Danger

H314 - Causes severe skin burns and eye damage.

*Prevention:

P221 Take any precaution to avoid mixing with combustibles.

*Response:

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

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***Storage:**

P405 Store locked up.

***Disposal:**




P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

***Chemical characterization**

***Description:** Mixture of substances listed below with nonhazardous additions.

***Dangerous components:**

CAS: 7697-37-2	nitric acid		2.5-10%
EINECS: 231-714-2		Danger: 	
		Warning: 	

***Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

***General information:** Immediately remove any clothing soiled by the product.

***After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

***After skin contact:** Immediately wash with water and soap and rinse thoroughly.

***After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

***After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire-fighting measures

***Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

***Protective equipment:** No special measures required.

6 Accidental release measures

***Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

***Measures for environmental protection:** Dilute with plenty of water.

***Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

***Handling:PPE to be worn. See section 8**

***Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

***Information about fire - and explosion protection:** No special measures required.

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***Storage:**

***Requirements to be met by storerooms and receptacles:** No special requirements.

***Information about storage in one common storage facility:** Not required.

***Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls/personal protection

***Additional information about design of technical facilities:** No further data; see item 7.

***Ingredients with limit values that require monitoring at the workplace:**

7697-37-2 nitric acid

OEL (Ireland)	Short-term value: 1 ppm IOELV
PEL (USA)	5 mg/m ³ , 2 ppm
REL (USA)	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5 mg/m ³ , 2 ppm
TLV (USA)	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5.2 mg/m ³ , 2 ppm
IOELV (European Union)	Short-term value: 2.6 mg/m ³ , 1 ppm

***Additional information:** The lists valid during the making were used as basis.

***Personal protective equipment:**

***General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

***Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

***Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

***Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

***Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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***Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

*General Information

Form:	Liquid
Colour:	According to product specification
Odour:	Characteristic

*Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100°C

***Flash point:** Not applicable.

***Self-igniting:** Product is not selfigniting.

***Danger of explosion:** Unknown

***Density at 20°C:** 1.03936 g/cm³

***Solubility/ miscibility with water:** Fully miscible.

*Solvent content:

Organic solvents: 0.0 %

10 Stability and reactivity

***Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

***Materials to be avoided:**

***Dangerous reactions** No dangerous reactions known.

***Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

***Acute toxicity:**

***Primary irritant effect:**

***on the skin:** Caustic effect on skin and mucous membranes.

***on the eye:** Strong caustic effect.

***Sensitization:** No sensitizing effects known.

***Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

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Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

***Additional ecological information:**

***General notes:**

Generally not hazardous for water

Must not reach sewage water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

***Product:**

***Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

***Uncleaned packaging:**

***Recommendation:** Disposal must be made according to official regulations.

***Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

***Land transport ADR/RID (cross-border)**

***ADR/RID class:** -

***Maritime transport IMDG:**

***Marine pollutant:** No

***UN "Model Regulation":** -

***Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

***Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directive 99/45/EC and all other EU Directives referred to therein.

***Code letter and hazard designation of product:**



C Corrosive

O oxidising

***Hazard-determining components of labelling:**

nitric acid

***Risk phrases:**

8 Contact with combustible material may cause fire.

34 Causes burns.

***Safety phrases:**

17 Keep away from combustible material.

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- 20 When using do not eat or drink.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

National regulations:**Waterhazard class:** Generally not hazardous for water.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS:** Safety OfficerContact:** Mr. Sean Murphy***Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IRL