

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2008

Revision: 22.06.2007

1 Identification of substance:

- **Product details:**

- **Trade name:** Apolipoprotein AI-HA [I] Buffer

- **Application of the substance / the preparation:** *In vitro diagnostics*

- **Manufacturer / Supplier:**

For Europe:

Wako Chemicals GmbH

Fuggerstrasse 12

D-41468 Neuss

Phone: ++49(0)2131 - 311-0

Fax: ++49(0)2131 - 311-100

- **E-mail address of the competent person responsible for the Safety Data Sheet:** *info@csb-online.de*

- **Informing department:** *Sales*

- **Emergency information:** *As above or next toxicological information centre*

2 Hazards identification

- **Hazard designation:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment**

R 22 Harmful if swallowed.

- **Classification system**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** *Mixture of the substances listed below with harmless products.*

- **Dangerous components:**

CAS: 26628-22-8	Sodium azide	T+, N; R 28-32-50/53	< 0.25%
EINECS: 247-852-1			
Index Number: 011-004-00-7			

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

4 First aid measures

- **General information**

Immediately remove any clothing contaminated by the product.

Take affected persons into the open air.

Do not leave affected persons unsupervised.

Personal protection for the person providing first aid.

Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- **After skin contact**

Rinse with plenty of water.

If skin irritation continues, consult a doctor.

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- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Administer medicinal carbon.
Seek immediate medical advice.

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** none
- **Special hazards caused by the material, its products of combustion or flue gases:**
Oxides of phosphorus (PxOy)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Sodium oxide (Na₂O)
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation.
Do not breathe vapours.
Remove all ignition sources.
Wear protective clothing.
Avoid skin and eye contact.
- **Measures for environmental protection:**
Do not allow to enter drainage system, surface or ground water.
Inform respective authorities in case product reaches water or sewage system.
Damp down gases/fumes/haze with water spray jet.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Use only in well ventilated areas.
Prevent formation of aerosols.
Do not inhale aerosols.
Avoid breathing vapours.
Avoid skin and eye contact.
Make sure that all applicable workplace limits are observed.
Any mixing with acids or products containing acids must be avoided under any circumstances.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Do not mix with heavy metals and their salts.

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Trade name: Apolipoprotein AI-HA [I] Buffer

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- **Storage**
- **Requirements to be met by storerooms and containers:**
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- **Further information about storage conditions:**
Store container in a well ventilated position.
Keep container tightly sealed.
Protect from heat and direct sunlight.
Store in a cool place.
Recommended storage temperature: 2 - 10 °C

8 Exposure controls and personal protection

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

- **Components with critical values that require monitoring at the workplace:**

26628-22-8 Sodium azide

WEL (Great Britain)	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³
TLV (European Union)	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³ Skin

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures**

- Keep away from foodstuffs, beverages and food.
- Instantly remove any contaminated garments.
- Do not eat, drink or smoke while working.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.
- Wash hands during breaks and at the end of the work.
- Use skin protection cream for preventive skin protection.

- **Breathing equipment:**

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

- **Protection of hands:**

- Protective gloves
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- Check the permeability prior to each renewed use of the glove.
- To avoid skin problems reduce the wearing of gloves to the required minimum.
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

- **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.

- **Eye protection:** Safety glasses

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Trade name: Apolipoprotein AI-HA [1] Buffer

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· **Body protection:** Protective work clothing

9 Physical and chemical properties:

· General Information

Form: liquid
Colour: colourless
 clear
Smell: odourless

· Change in condition

Melting point/Melting range: not determined
Boiling point/Boiling range: not determined

· **Flash point:** not applicable

· **Inflammability (solid, gaseous)** Product is not inflammable.

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** not determined

· Solubility in / Miscibility with

Water: miscible

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

Sunlight

Heat

Sources of ignition

· Materials to be avoided:

Strong oxidizing agents

Strong acids

Heavy metals

Substances reactive to water

· Dangerous reactions

Reacts with various metals

(Sodium azide may react with copper or lead plumbing to form explosive compounds)

· Dangerous products of decomposition:

Phosphorus oxides (e.g. P_2O_5)

Nitrogen oxides (NOx)

Sulphur oxides (SOx)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

Sodium oxide (Na₂O)

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

26628-22-8 Sodium azide

Oral	LD50	27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

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Trade name: Apolipoprotein AI-HA [1] Buffer

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- **Primary irritant effect:**
- **on the skin:** Slightly irritating
- **on the eye:** Weak irritating effect
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful

12 Ecological information:

- **Information about elimination (persistence and degradability):**
 - **Other information:** not determined
 - **Behaviour in environmental systems:**
 - **Mobility and bioaccumulation potential:** not determined
 - **Ecotoxicological effects:**
- | | |
|----------------------------|---|
| · Aquatic toxicity: | |
| 26628-22-8 Sodium azide | |
| EC50/48 h | 4.2 mg/l (Daphnia pulex) |
| LC50/96 h | 0.7 mg/l (bluegill (Lepomis macrochirus)) |
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal must be made according to official regulations.
- **European waste catalogue**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|---|
| · Land transport ADR/RID (cross-border): | |
| · ADR/RID Class: | - |
| · Maritime transport IMDG/GGVSea: | |
| · IMDG/GGVSea Class: | - |
| · Air transport ICAO-TI and IATA-DGR: | |
| · ICAO/IATA Class: | - |
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified/labelled in accordance with EC Directives / relevant national laws.

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Trade name: Apolipoprotein AI-HA [1] Buffer

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



Xn Harmful

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

Sodium azide

· **Risk phrases:**

22 Harmful if swallowed.

· **Safety phrases:**

14 Keep away from acids.

28 After contact with skin, wash immediately with plenty of water.

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.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· **National regulations**

· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

· **Decree to be applied in case of technical fault:** -

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Concerning: Revised data

The current MSDS has been changed against the previous version. Chapters which have been changed, are marked with an asterisk * at the chapter number.

· **Relevant R-phrases:**

The(se) R-phrase(s) are those of the ingredient(s) and do(es) NOT represent the classification of the preparation.

28 Very toxic if swallowed.

32 Contact with acids liberates very toxic gas.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS:**

C.S.B. GmbH Phone: ++49 - 2151 - 652086-0

Oberstraße 10 Fax: ++49 - 2151 - 652086-9

D-47829 Krefeld

Germany

· * **Data compared to the previous version altered.**

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according to 1907/2006/EC, Article 31

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Revision: 22.06.2007

1 Identification of substance:

- **Product details:**

- **Trade name:** Apolipoprotein AI-HA [2] Antibody

- **Application of the substance / the preparation:** *In vitro diagnostics*

- **Manufacturer / Supplier:**

For Europe:

Wako Chemicals GmbH

Fuggerstrasse 12

D-41468 Neuss

Phone: ++49(0)2131 - 311-0

Fax: ++49(0)2131 - 311-100

- **E-mail address of the competent person responsible for the Safety Data Sheet:** *info@csb-online.de*

- **Informing department:** *Sales*

- **Emergency information:** *As above or next toxicological information centre*

2 Hazards identification

- **Hazard designation:**



Xn Harmful

- **Information pertaining to particular dangers for man and environment**

R 22 Harmful if swallowed.

- **Classification system**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** *Mixture of the substances listed below with harmless products.*

- **Dangerous components:**

CAS: 26628-22-8	Sodium azide	T+, N; R 28-32-50/53	< 0.25%
EINECS: 247-852-1			
Index Number: 011-004-00-7			

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

4 First aid measures

- **General information**

Immediately remove any clothing contaminated by the product.

Take affected persons into the open air.

Do not leave affected persons unsupervised.

Personal protection for the person providing first aid.

Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- **After skin contact**

Rinse with plenty of water.

If skin irritation continues, consult a doctor.

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according to 1907/2006/EC, Article 31

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Trade name: Apolipoprotein AI-HA [2] Antibody

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- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Administer medicinal carbon.
Seek immediate medical advice.

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** none
- **Special hazards caused by the material, its products of combustion or flue gases:**
Oxides of phosphorus (PxOy)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Sodium oxide (Na₂O)
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation.
Remove all ignition sources.
Do not breathe vapours.
Wear protective clothing.
Avoid skin and eye contact.
- **Measures for environmental protection:**
Do not allow to enter drainage system, surface or ground water.
Inform respective authorities in case product reaches water or sewage system.
Damp down gases/fumes/haze with water spray jet.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Use only in well ventilated areas.
Prevent formation of aerosols.
Do not inhale aerosols.
Avoid breathing vapours.
Avoid skin and eye contact.
Make sure that all applicable workplace limits are observed.
Any mixing with acids or products containing acids must be avoided under any circumstances.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Do not mix with heavy metals and their salts.

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Trade name: Apolipoprotein AI-HA [2] Antibody

(Contd. of page 2)

- **Storage**
- **Requirements to be met by storerooms and containers:**
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- **Further information about storage conditions:**
Store container in a well ventilated position.
Keep container tightly sealed.
Protect from heat and direct sunlight.
Store in a cool place.
Recommended storage temperature: 2 - 10 °C

8 Exposure controls and personal protection

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

- **Components with critical values that require monitoring at the workplace:**

26628-22-8 Sodium azide

WEL (Great Britain)	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³
TLV (European Union)	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³ Skin

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Do not eat, drink or smoke while working.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Wash hands during breaks and at the end of the work.

Use skin protection cream for preventive skin protection.

- **Breathing equipment:**

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

- **Protection of hands:**

Protective gloves

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

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

Check the permeability prior to each renewed use of the glove.

To avoid skin problems reduce the wearing of gloves to the required minimum.

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

- **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.

- **Eye protection:** Safety glasses

(Contd. on page 4)

GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 05.02.2008

Revision: 22.06.2007

Trade name: Apolipoprotein AI-HA [2] Antibody

(Contd. of page 3)

· **Body protection:** Protective work clothing

9 Physical and chemical properties:

· General Information

Form: liquid
Colour: yellowish brown
 clear
Smell: odourless

· Change in condition

Melting point/Melting range: not determined
Boiling point/Boiling range: not determined

· **Flash point:** not applicable

· **Inflammability (solid, gaseous)** Product is not inflammable.

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** not determined

· Solubility in / Miscibility with

Water: miscible

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

Sources of ignition
 Sunlight
 Heat

· Materials to be avoided:

Strong oxidizing agents
 Strong acids
 Heavy metals
 Substances reactive to water

· Dangerous reactions

Reacts with various metals
 (Sodium azide may react with copper or lead plumbing to form explosive compounds)

· Dangerous products of decomposition:

Phosphorus oxides (e.g. P_2O_5)
 Nitrogen oxides (NOx)
 Sulphur oxides (SOx)
 Carbon monoxide (CO) and Carbon dioxide (CO₂)
 Sodium oxide (Na₂O)

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

26628-22-8 Sodium azide

Oral	LD50	27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

(Contd. on page 5)

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Trade name: Apolipoprotein AI-HA [2] Antibody

(Contd. of page 4)

- **Primary irritant effect:**
- **on the skin:** Slightly irritating
- **on the eye:** Weak irritating effect
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful

12 Ecological information:

- **Information about elimination (persistence and degradability):**
 - **Other information:** not determined
 - **Behaviour in environmental systems:**
 - **Mobility and bioaccumulation potential:** not determined
 - **Ecotoxicological effects:**
- | | |
|----------------------------|---|
| · Aquatic toxicity: | |
| 26628-22-8 Sodium azide | |
| EC50/48 h | 4.2 mg/l (Daphnia pulex) |
| LC50/96 h | 0.7 mg/l (bluegill (Lepomis macrochirus)) |
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal must be made according to official regulations.
- **European waste catalogue**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|---|
| · Land transport ADR/RID (cross-border): | |
| · ADR/RID Class: | - |
| · Maritime transport IMDG/GGVSea: | |
| · IMDG/GGVSea Class: | - |
| · Air transport ICAO-TI and IATA-DGR: | |
| · ICAO/IATA Class: | - |
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified/labelled in accordance with EC Directives / relevant national laws.

(Contd. on page 6)

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Revision: 22.06.2007

Trade name: Apolipoprotein AI-HA [2] Antibody

(Contd. of page 5)

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

Xn Harmful

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

Sodium azide

· **Risk phrases:**

22 Harmful if swallowed.

· **Safety phrases:**

14 Keep away from acids.

28 After contact with skin, wash immediately with plenty of water.

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.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· **National regulations**· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.· **Decree to be applied in case of technical fault:** -· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water**16 Other information:**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Concerning: Revised data

The current MSDS has been changed against the previous version. Chapters which have been changed, are marked with an asterisk * at the chapter number.

· **Relevant R-phrases:**

The(se) R-phrases are those of the ingredient(s) and do(es) NOT represent the classification of the preparation.

28 Very toxic if swallowed.

32 Contact with acids liberates very toxic gas.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing MSDS:**

C.S.B. GmbH Phone: ++49 - 2151 - 652086-0

Oberstraße 10 Fax: ++49 - 2151 - 652086-9

D-47829 Krefeld

Germany

· *** Data compared to the previous version altered.**