

**Kit SDS Cover Sheet**Doc. ID: OSR6109-75: Rev. 05  
Revised (year/month/day) 2015/03/20

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**Product Information**

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<b>Product Name</b>	AST
<b>Part Number</b>	OSR6209, OSR6509, OSR6009, OSR6109, OSR6609

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**Components**

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<b>Description</b>	AST R1 AST R2
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**Transport Information**

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Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.



## SAFETY DATA SHEET

Doc. ID: OSR6109-75 Rev. 05  
Revised (year/month/day) 2015/03/20

### Section 1 Identification of the Substance/mixture and of the Company/undertaking

#### 1.1 Product Identifier

**Product Name** AST R1  
**Part Number** Component of P/N OSR6009, OSR6109, OSR6209, OSR6509, OSR6609

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

**Product Use** For In Vitro Diagnostic Use. See product literature for details.

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer

Beckman Coulter, Inc.  
250 S. Kraemer Blvd  
Brea, CA 92821, U.S.A.  
Tel: 800-854-3633

##### EC REP Address

Beckman Coulter Ireland Inc.  
Lismeehan  
O'Callaghan's Mills  
Co. Clare  
Ireland  
Tel: 353 (0)65 6831100

##### e-mail address

SDSNT@beckman.com  
Further information Contact:  
Customer support Unit, Beckman Coulter Ireland Inc.  
Technical Service Department Tel. +001-800-854-3633 (PST)  
E-mail CC\_Support.ie@beckman.com

#### 1.4 Emergency telephone number

**Telephone number (24H)** Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887  
Tel +353 (0)65 683 1170; 08:00 - 16:30 hrs Mon-Thur, 08:00 - 15:30 hrs Fri (GMT) Tel +001-800-223-0130 (PST)

##### Distributor and Emergency Phone No.

Refer to attached list, Document ID: [472050](#), for local distributor and emergency phone numbers.

### Section 2 Hazards Identification

#### 2.1 Classification of substance or mixture

**Product Description** In vitro diagnostic reagent.  
Light yellow; Clear; Liquid; Mild odor

##### Classification according to EC 1272/2008 (CLP/GHS)

Not classified as hazardous per EC 1272/2008 (CLP/GHS)

##### Classification according to EC Directives 1999/45/EC and 67/548/EEC

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

## Section 2 Hazards Identification (Continued)

### Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Skin Irritation Category 3

#### 2.2 Label Elements

**According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS**

#### Hazardous Ingredients

Tris(hydroxymethyl)- aminomethane

#### Pictogram

None

#### Signal Word

WARNING

#### Hazard Statements

H316 Causes mild skin irritation.

#### Precautionary Statements

P332+P313 If skin irritation occurs: Get medical advice/attention.

#### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

This product contains concentrations of azide below the hazardous level which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds. Sodium azide forms explosive compounds with heavy metals.

This product contains material(s) of animal origin. Observe general safety guidelines for protection when handling this product.

See Section 11 Toxicological Information for more detailed health information.

## Section 3 Composition and Information on Ingredients

### 3.2 Mixtures

Hazardous Ingredients:		Hazard Classification of Pure Ingredients			
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	GHS	
Tris(hydroxymethyl)-aminomethane CAS # 77-86-1 EINECS # 201-064-4 Index # Not available	5 - 8	Xi;R36/37/38	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 H315; H319; H335	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 H315; H319; H335	
Sodium Azide CAS # 26628-22-8 EINECS # 247-852-1 Index # 011-004-00-7	< 0.1	T+;R28-32 N;R50/53	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	2, 8

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## Section 3 Composition and Information on Ingredients (Continued)

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2 - Substance with Community workplace exposure limits  
8 - Present at concentration below the cut-off limits.

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See section 8 for available Occupational exposure limits  
See Section 15 for additional regulatory information  
See Section 16 for hazard class, hazard statements and risk phrase description

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## Section 4 First Aid Measures

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### 4.1 Description of first aid measures

#### Inhalation

If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

#### Eye Contact

If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.

#### Skin Contact

In case of skin contact, remove any contaminated clothing. Wash affected area with plenty of soap and water for at least 15 minutes. If pain or irritation occur, obtain medical attention.

#### Ingestion

If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation.

See Section 11 Toxicological Information for more detailed health information.

### 4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

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## Section 5 Fire Fighting Measures

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### Flammable Properties

Nonflammable aqueous solution.

### 5.1 Extinguishing Media

In case of fire use carbon dioxide (CO<sub>2</sub>), dry chemical, water spray or foam.  
For large fires use extinguishing media suitable for surrounding fire.

### 5.2 Special hazards arising from the substance or mixture

#### Special Fire and Explosion Hazards

No special hazards determined.

#### Hazardous Combustion Products

No combustion products posing significant hazards are expected from this product (an aqueous solution).

### 5.3 Advice for fire fighters

#### Protective Equipment

Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

### 5.4 Additional information

No further relevant information available.

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## Section 6 Accidental Release Measures

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

#### Personal Precautions

This product contains a material of animal origin. Observe general safety guidelines for protection during clean up procedures.

Wear protective gloves, protective clothing and eye/face protection.

### 6.2 Environmental Precautions

Contain spill to prevent migration.

Do not allow the undiluted product to enter sewers/surface or ground water.

### 6.3 Methods and material for containment and cleaning up

#### Spill and Leak Procedures

As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

### 6.4 Reference to other sections

Refer sections 8 and 13.

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## Section 7 Handling and Storage

**7.1 Precautions for safe handling** This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C , as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

### 7.3 Specific end uses

No further relevant information available.

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## Section 8 Exposure Controls and Personal Protection

### 8.1 Control parameters

#### Exposure Limits

##### US OSHA

None established

##### ACGIH

Sodium Azide  
CAS # 26628-22-8

0.29 mg/m3 Ceiling (as NaN<sub>3</sub>); 0.11 ppm Ceiling (as Hydrazoic acid) (vapor)

##### DFG MAK

Sodium Azide  
CAS # 26628-22-8

0.4 mg/m3 Peak (inhalable fraction); 0.2 mg/m3 TWA MAK (inhalable fraction)

##### Ireland

Sodium Azide  
CAS # 26628-22-8

0.1 mg/m3 TWA (as NaN<sub>3</sub>); 0.3 mg/m3 STEL (as NaN<sub>3</sub>); Potential for cutaneous absorption

## Section 8 Exposure Controls and Personal Protection (Continued)

### IOELVs

Sodium Azide  
CAS # 26628-22-8

Possibility of significant uptake through the skin; 0.1 mg/m<sup>3</sup> TWA; 0.3 mg/m<sup>3</sup> STEL

### NIOSH

None established

### Japan

None established

## 8.2 Exposure controls

### Engineering Controls

No special engineering controls are required. Use with good general ventilation.

### Eye Protection

Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.

### Skin Protection

Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

### Respiratory Protection

Under normal conditions, the use of this product should not require respiratory protection.

## Section 9 Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Specific Gravity (Water=1.0)</b>	1.12
<b>Color</b>	Light yellow	<b>Solubility</b>	
<b>Transparency</b>	Clear	<b>Water</b>	Fully miscible
<b>Odor</b>	Mild odor	<b>Organic</b>	Not determined
<b>pH</b>	8.2 @20°C	<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Freezing Point</b>	Similar to water, approximately 0 °C	<b>Auto-ignition Temp.</b>	Product is not selfigniting
<b>Boiling Point</b>	Similar to water, approximately 100 °C	<b>Decomposition Temperature</b>	Not determined
<b>Flash Point</b>	Not applicable	<b>Percent Volatiles</b>	Not applicable
<b>Evaporation Rate</b>	Not determined	<b>Vapor Pressure</b>	Similar to water, approximately 23 hPa
<b>Flammability (Solid, Gas)</b>	Not applicable	<b>Viscosity</b>	Not determined
<b>Flammability Limits</b>	Not applicable	<b>Explosive Properties</b>	Not applicable
<b>Vapor Density</b>	Not determined	<b>Oxidizing Properties</b>	Not applicable

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## Section 9 Physical and Chemical Properties (Continued)

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<b>Odor Threshold</b>	Not applicable
<b>9.2 Other Information</b>	No further relevant information available.

## Section 10 Stability and Reactivity

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<b>10.1 Reactivity</b>	No further relevant information available.
<b>10.2 Chemical Stability</b>	The product is stable in accordance with recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentrations of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
<b>10.4 Conditions to Avoid</b>	Avoid contact with incompatible materials. Avoid exposure to heat and direct sunlight.
<b>10.5 Incompatible materials</b>	Metals and metallic compounds
<b>10.6 Hazardous Decomposition Products</b>	No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

## Section 11 Toxicological Information

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<b>11.1 Information on toxicological effects</b>	
<b>Toxicity Data for Hazardous Ingredients</b>	
Sodium Azide CAS # 26628-22-8	Oral LD50 Rat 27 mg/kg; Dermal LD50 Rat 50 mg/kg; Dermal LD50 Rabbit 20 mg/kg
<b>Primary Routes of Exposure</b>	Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.
<b>Skin Corrosion/Irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	No data available.
<b>Respiratory/skin sensitization</b>	No data available.
<b>Carcinogenicity</b>	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.
<b>Germ cell mutagenicity</b>	No data available
<b>Reproductive Toxicity</b>	No data available.
<b>Specific target organ toxicity – single exposure</b>	No data available.

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## Section 11 Toxicological Information (Continued)

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### Specific target organ toxicity – repeated exposure

No data available.

### Aspiration hazard

No data available.

### Other Information

This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases.

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## Section 12 Ecological Information

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### 12.1 Ecotoxicity

#### Fresh Water Species

Sodium Azide  
CAS # 26628-22-8

96 h LC50 *Oncorhynchus mykiss*: 0.8 mg/L; 96 h LC50 *Lepomis macrochirus*: 0.7 mg/L; 96 h LC50 *Pimephales promelas*: 5.46 mg/L [flow-through]

#### Microtox

No information available.

#### Water Flea

No information available.

#### Fresh Water Algae

No information available.

**12.2 Persistence and degradability** Not determined for the product.

**12.3 Bioaccumulation** Not determined for the product.

**12.4 Mobility in soil** Not determined for the product.

### 12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

### 12.6 Other Adverse Effects

This product contains environmentally hazardous substance below the cutoff level. Refer section 3 for ingredient information. Do not allow undiluted product to enter sewer/surface or ground water.

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## Section 13 Disposal Considerations

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### 13.1 Waste treatment methods

#### Product Waste Disposal

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).

To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.

Dispose of as potentially biohazardous waste and in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or approved waste-disposal company for information.



**Package disposal**

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

**13.2 Additional information**

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

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## Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

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## Section 15 Regulatory Information

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

#### US Federal and State Regulations

**SARA 313** Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

**CERCLA RG's, 40 CFR 302.4** Sodium Azide is listed.

**California Proposition 65** No ingredients listed.

**Massachusetts MSL** Sodium Azide is listed.

**New Jersey Dept. of Health RTK List**

Sodium Azide is listed.

**Pennsylvania RTK** Sodium Azide is listed.

#### EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

**Water Hazard Class (Germany) WGK 2**, water endangering

**REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.**

No ingredients listed.

**According to EC Directives (1999/45/EC and 67/548 EEC)**

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

#### Canada

This product is exempt from WHMIS label and SDS requirements.

**PIN** Not applicable

#### **Ingredients on Ingredient Disclosure List**

Polyoxyethylated Octyl Phenol

Sodium Azide

#### **Ingredients with unknown toxicological properties**

Product is exempt

## Section 15 Regulatory Information (Continued)

**15.2 Chemical Safety Assessment** A Chemical Safety Assessment has not been carried out.

*Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.*

## Section 16 Other Information

<b>Beckman Coulter Safety Rating</b>	<b>Flammability: 0</b> <b>Health: 1</b> <b>Reactivity with Water: 0</b> <b>Contact: 1</b>	Code 0=None 1=Slight 2=Caution 3=Severe
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**Revision Changes** Updated to GHS.

**Hazard Class, hazard statements and risk phrase description from section 3**

- N - Dangerous for the environment
- T+ - Very toxic
- Xi - Irritant
- R28 Very toxic if swallowed.
- R32 Contact with acids liberates very toxic gas.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Aquatic Acute 1 - Aquatic Hazard Acute, Category 1
- Acute Tox. Oral 2 - Acute Toxicity Oral, Category 2
- Eye Irrit. 2 - Eye Irritation Category 2
- Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1
- Skin Irrit. 2 - Skin Irritation Category 2
- STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3
- H300 - Fatal if swallowed.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

**Abbreviations and Acronyms**

- ACGIH - American Conference of Governmental Industrial Hygienists
- ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road
- CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
- CLP - Classification, Labeling and Packaging
- DFGMAK - Republic Germany's maximum exposure limit
- GHS - Globally Harmonized System
- HCS - Hazard Communication Standard
- IATA - International Air Transport Association
- ICAO - International Civil Aviation Organization

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## Section 16 Other Information (Continued)

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IMDG - International Maritime Dangerous Goods  
IOELVs - European Unions' Indicative Occupational Exposure Limit Values  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration  
PBT - Persistent bioaccumulative and toxic substances  
SARA - Superfund Amendments and Reauthorization Act  
TDG - Canadian Transportation Of Dangerous Goods Regulations.  
UN GHS - United Nations Globally Harmonized System  
US DOT - United States Department of Transportation  
WHMIS - Workplace Hazardous Material Information System  
vPvB - Very persistent and very bioaccumulative substances  
LC50 - Lethal Concentration, 50%  
LD50 - Lethal Dose, 50%

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For further information, please contact your local Beckman Coulter, Inc. representative.

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## SAFETY DATA SHEET

Doc. ID: OSR6109-75 Rev. 05  
Revised (year/month/day) 2015/03/20

### Section 1 Identification of the Substance/mixture and of the Company/undertaking

#### 1.1 Product Identifier

**Product Name** AST R2  
**Part Number** Component of P/N OSR6009, OSR6109, OSR6209, OSR6509, OSR6609

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

**Product Use** For In Vitro Diagnostic Use. See product literature for details.

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer

Beckman Coulter, Inc.  
250 S. Kraemer Blvd  
Brea, CA 92821, U.S.A.  
Tel: 800-854-3633

##### EC REP Address

Beckman Coulter Ireland Inc.  
Lismeehan  
O'Callaghan's Mills  
Co. Clare  
Ireland  
Tel: 353 (0)65 6831100

##### e-mail address

SDSNT@beckman.com  
Further information Contact:  
Customer support Unit, Beckman Coulter Ireland Inc.  
Technical Service Department Tel. +001-800-854-3633 (PST)  
E-mail CC\_Support.ie@beckman.com

#### 1.4 Emergency telephone number

**Telephone number (24H)** Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887  
Tel +353 (0)65 683 1170; 08:00 - 16:30 hrs Mon-Thur, 08:00 - 15:30 hrs Fri (GMT) Tel +001-800-223-0130 (PST)

##### Distributor and Emergency Phone No.

Refer to attached list, Document ID: [472050](#), for local distributor and emergency phone numbers.

### Section 2 Hazards Identification

#### 2.1 Classification of substance or mixture

**Product Description** In vitro diagnostic reagent.  
Yellowish; Clear; Liquid; Characteristic odor

##### Classification according to EC 1272/2008 (CLP/GHS)

Not classified as hazardous per EC 1272/2008 (CLP/GHS)

##### Classification according to EC Directives 1999/45/EC and 67/548/EEC

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

## Section 2 Hazards Identification (Continued)

### Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Not classified as hazardous per US-OSHA HCS 2012 and UN GHS

#### 2.2 Label Elements

**According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS**

Not classified as hazardous per EC 1272/2008 (CLP/GHS)

#### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

This product contains concentrations of azide below the hazardous level which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds. Sodium azide forms explosive compounds with heavy metals.

This product contains material(s) of animal origin. Observe general safety guidelines for protection when handling this product.

See Section 11 Toxicological Information for more detailed health information.

## Section 3 Composition and Information on Ingredients

### 3.2 Mixtures

Hazardous Ingredients:		Hazard Classification of Pure Ingredients			
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	GHS	
Sodium Azide CAS # 26628-22-8 EINECS # 247-852-1 Index # 011-004-00-7	< 0.1	T+;R28-32 N;R50/53	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	Acute Tox. Oral 2 Aquatic Acute 1 Aquatic Longterm 1 H300; H400; H410	2, 8

2 - Substance with Community workplace exposure limits

8 - Present at concentration below the cut-off limits.

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

## Section 4 First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

#### Eye Contact

If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.

#### Skin Contact

In case of skin contact, remove any contaminated clothing. Wash affected area with plenty of soap and water for at least 15 minutes. If pain or irritation occur, obtain medical attention.

#### Ingestion

If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

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## Section 4 First Aid Measures (Continued)

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**4.2 Most important symptoms and effects, both acute and delayed**

No adverse symptoms or effects have been identified.

**4.3 Indication of any immediate medical attention and special treatment needed**

No specific medical attention or treatment required.

## Section 5 Fire Fighting Measures

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**Flammable Properties** Nonflammable aqueous solution.

**5.1 Extinguishing Media**

In case of fire use carbon dioxide (CO<sub>2</sub>), dry chemical, water spray or foam.  
For large fires use extinguishing media suitable for surrounding fire.

**5.2 Special hazards arising from the substance or mixture**

**Special Fire and Explosion Hazards**

No special hazards determined.

**Hazardous Combustion Products**

No combustion products posing significant hazards are expected from this product (an aqueous solution).

**5.3 Advice for fire fighters**

**Protective Equipment**

Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

**5.4 Additional information**

No further relevant information available.

## Section 6 Accidental Release Measures

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**6.1 Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**

This product contains a material of animal origin. Observe general safety guidelines for protection during clean up procedures.  
Wear protective gloves, protective clothing and eye/face protection.

**6.2 Environmental Precautions**

Contain spill to prevent migration.  
Do not allow the undiluted product to enter sewers/surface or ground water.

**6.3 Methods and material for containment and cleaning up**

**Spill and Leak Procedures**

As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

**6.4 Reference to other sections**

Refer sections 8 and 13.

## Section 7 Handling and Storage

- 7.1 Precautions for safe handling** This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Store at 2 to 8°C , as directed on the product label.  
To maintain product quality, store according to the instructions in the product labeling.  
Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).
- 7.3 Specific end uses** No further relevant information available.

## Section 8 Exposure Controls and Personal Protection

- 8.1 Control parameters**
- Exposure Limits**
- US OSHA** None established
- ACGIH**
- Sodium Azide  
CAS # 26628-22-8 0.29 mg/m3 Ceiling (as NaN<sub>3</sub>); 0.11 ppm Ceiling (as Hydrazoic acid) (vapor)
- DFG MAK**
- Sodium Azide  
CAS # 26628-22-8 0.4 mg/m3 Peak (inhalable fraction); 0.2 mg/m3 TWA MAK (inhalable fraction)
- Ireland**
- Sodium Azide  
CAS # 26628-22-8 0.1 mg/m3 TWA (as NaN<sub>3</sub>); 0.3 mg/m3 STEL (as NaN<sub>3</sub>); Potential for cutaneous absorption
- IOELVs**
- Sodium Azide  
CAS # 26628-22-8 Possibility of significant uptake through the skin; 0.1 mg/m3 TWA; 0.3 mg/m3 STEL
- NIOSH** None established
- Japan** None established
- 8.2 Exposure controls**
- Engineering Controls** No special engineering controls are required. Use with good general ventilation.
- Eye Protection** Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.

## Section 8 Exposure Controls and Personal Protection (Continued)

<b>Skin Protection</b>	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
<b>Respiratory Protection</b>	Under normal conditions, the use of this product should not require respiratory protection.

## Section 9 Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Specific Gravity (Water=1.0)</b>	1.01
<b>Color</b>	Yellowish	<b>Solubility</b>	
<b>Transparency</b>	Clear	<b>Water</b>	Fully miscible
<b>Odor</b>	Characteristic odor	<b>Organic</b>	Not determined
<b>pH</b>	10.2 @20°C	<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Freezing Point</b>	Similar to water, approximately 0 °C	<b>Auto-ignition Temp.</b>	Product is not selfigniting
<b>Boiling Point</b>	Similar to water, approximately 100 °C	<b>Decomposition Temperature</b>	Not determined
<b>Flash Point</b>	Not applicable	<b>Percent Volatiles</b>	Not applicable
<b>Evaporation Rate</b>	Not determined	<b>Vapor Pressure</b>	Similar to water, approximately 23 hPa
<b>Flammability (Solid, Gas)</b>	Not applicable	<b>Viscosity</b>	Not determined
<b>Flammability Limits</b>	Not applicable	<b>Explosive Properties</b>	Not applicable
<b>Vapor Density</b>	Not determined	<b>Oxidizing Properties</b>	Not applicable
<b>Odor Threshold</b>	Not applicable		

**9.2 Other Information** No further relevant information available.

## Section 10 Stability and Reactivity

<b>10.1 Reactivity</b>	No further relevant information available.
<b>10.2 Chemical Stability</b>	The product is stable in accordance with recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentrations of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.



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## Section 10 Stability and Reactivity (Continued)

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- 10.4 Conditions to Avoid** Avoid contact with incompatible materials.  
Avoid exposure to heat and direct sunlight.
- 10.5 Incompatible materials** Metals and metallic compounds
- 10.6 Hazardous Decomposition Products**  
No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

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## Section 11 Toxicological Information

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### 11.1 Information on toxicological effects

#### Toxicity Data for Hazardous Ingredients

Sodium Azide  
CAS # 26628-22-8

Oral LD50 Rat 27 mg/kg; Dermal LD50 Rat 50 mg/kg; Dermal LD50 Rabbit 20 mg/kg

**Primary Routes of Exposure** Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.

**Skin Corrosion/Irritation** No data available.

**Serious eye damage/eye irritation** No data available.

**Respiratory/skin sensitization** No data available.

**Carcinogenicity** No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

**Germ cell mutagenicity** No data available

**Reproductive Toxicity** No data available.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard** No data available.

**Other Information** This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases.

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## Section 12 Ecological Information

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- 12.1 Ecotoxicity**
- Fresh Water Species**  
Sodium Azide  
CAS # 26628-22-8  
96 h LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 h LC50 Lepomis macrochirus: 0.7 mg/L; 96 h LC50 Pimephales promelas: 5.46 mg/L [flow-through]
- Microtox**  
No information available.
- Water Flea**  
No information available.
- Fresh Water Algae**  
No information available.
- 12.2 Persistence and degradability** Not determined for the product.
- 12.3 Bioaccumulation** Not determined for the product.
- 12.4 Mobility in soil** Not determined for the product.
- 12.5 Results of PBT and vPvB assessment**  
Not determined for the product. PBT: Not applicable, vPvB: Not applicable.
- 12.6 Other Adverse Effects**  
This product contains environmentally hazardous substance below the cutoff level. Refer section 3 for ingredient information. Do not allow undiluted product to enter sewer/surface or ground water.

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## Section 13 Disposal Considerations

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- 13.1 Waste treatment methods**
- Product Waste Disposal**  
Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.  
Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).  
To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.  
Dispose of as potentially biohazardous waste and in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.
- Package disposal**  
Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.
- 13.2 Additional information**  
Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

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## Section 14 Transport Information

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Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

## Section 15 Regulatory Information

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

#### US Federal and State Regulations

**SARA 313** Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

**CERCLA RG's, 40 CFR 302.4** Sodium Azide is listed.

**California Proposition 65** No ingredients listed.

**Massachusetts MSL** Sodium Azide is listed.

#### **New Jersey Dept. of Health RTK List**

Sodium Azide is listed.

**Pennsylvania RTK** Sodium Azide is listed.

#### EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

#### **REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.**

No ingredients listed.

#### **According to EC Directives (1999/45/EC and 67/548 EEC)**

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

#### Canada

This product is exempt from WHMIS label and SDS requirements.

**PIN** Not applicable

#### **Ingredients on Ingredient Disclosure List**

Sodium Carbonate  
Polyoxyethylated Octyl Phenol  
Sodium Azide

#### **Ingredients with unknown toxicological properties**

Product is exempt

### 15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

*Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.*

## Section 16 Other Information

<b>Beckman Coulter Safety Rating</b>	<b>Flammability: 0</b> <b>Health: 1</b> <b>Reactivity with Water: 0</b> <b>Contact: 1</b>	Code 0=None 1=Slight 2=Caution 3=Severe
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**Revision Changes** Updated to GHS.

### Hazard Class, hazard statements and risk phrase description from section 3

N - Dangerous for the environment  
T+ - Very toxic  
R28 Very toxic if swallowed.  
R32 Contact with acids liberates very toxic gas.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Aquatic Acute 1 - Aquatic Hazard Acute, Category 1  
Acute Tox. Oral 2 - Acute Toxicity Oral, Category 2  
Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1  
H300 - Fatal if swallowed.  
H400 - Very toxic to aquatic life.  
H410 - Very toxic to aquatic life with long lasting effects.

### Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road  
CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act  
CLP - Classification, Labeling and Packaging  
DFGMAK - Republic Germany's maximum exposure limit  
GHS - Globally Harmonized System  
HCS - Hazard Communication Standard  
IATA - International Air Transport Association  
ICAO - International Civil Aviation Organization  
IMDG - International Maritime Dangerous Goods  
IOELVs - European Unions' Indicative Occupational Exposure Limit Values  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration  
PBT - Persistent bioaccumulative and toxic substances  
SARA - Superfund Amendments and Reauthorization Act  
TDG - Canadian Transportation Of Dangerous Goods Regulations.  
UN GHS - United Nations Globally Harmonized System  
US DOT - United States Department of Transportation  
WHMIS - Workplace Hazardous Material Information System  
vPvB - Very persistent and very bioaccumulative substances  
LC50 - Lethal Concentration, 50%

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## Section 16 Other Information (Continued)

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### LD50 - Lethal Dose, 50%

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For further information, please contact your local Beckman Coulter, Inc. representative.

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