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1 Identification

1.1 Product Identifier

Product Name Aline PCRClean DX

C-1003-5; C-1003-50; C-1003-

Product Part Number 250; C-1003-450

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

Product Use For Research Use Only. See product literature for details.

1.3 Details of the supplier of the safety data sheet

Manufacturer EC REP Address

Aline Biosciences LLC.

175-KK New Boston Street

Woburn MA 01801, U.S.A.

Tel: 1-888-987-3677

Aline Biosciences LLC.

175-KK New Boston Street

Woburn MA 01801, U.S.A.

Telephone 1-888-987-3677

Monday through Friday, 9:00 am to

7:00pm)

e-mail address info@alinebiosciences.com

1.4 Emergency telephone number

Telephone number (24H) USA 1-888-987-3677, International 1-888-987-3677

703-527-3887

2 Hazards Identification

2.1 Classification of substance or mixture

Product Description Mixture

Brown; Clear with brown precipitate; Liquid; Odorless

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)

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), US-OSHA and GHS



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2 Hazards Identification (Continued)

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.

See Section 11 Toxicological Information for more detailed health information.

3 Composition/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	<0.005	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

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

4 First Aid Measures

4.1 Description of first aid measures

After Inhalation Consult a doctor for complaints.

After Eye Contact Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a

doctor. If easy to do so, remove contact lenses if worn.

After Skin Contact Immediately wash with water and soap and rinse thoroughly

After Ingestion If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration by trained personnel and consult a doctor.

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.

^{8 -} Present at concentration below the cut-off limits.



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5 Fire-Fighting Measures

Flammable Properties Nonflammable aqueous solution.

5.1 Extinguishing Media For large fires use extinguishing media suitable for surrounding fire.

In case of fire use carbon dioxide (CO2), dry chemical, sand, water spray or foam.

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 As in any fire, wear self-contained breathing apparatus pressure-demand

(NIOSH approved or equivalent) and full protective gear to prevent

contact with skin and eyes.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use good laboratory procedures; avoid eye and skin contact.

6.2 Environmental Precautions

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

6.3 Methods and material for containment and cleaning up

Spill and Leak Procedures Absorb spilled material with an appropriate inert, non-flammable absorbent and

Dispose of the collected material according to regulations.

6.4 Reference to other sections Refer sections 8 and 13.

7 Handling and Storage

7.1 Precautions for safe handling Use good laboratory procedures; avoid eye and skin contact.

7.2 Conditions for safe storage, including any incompatibilities

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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8 Exposure Controls and Personal Protection

8.1 Control parameters

Exposure Limits

US OSHA None established

ACGIH

Sodium Azide 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (as Hydrazoic acid) (vapor)

CAS # 26628-22-8

DFG MAK

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

CAS # 26628-22-8

Ireland

Sodium Azide 0.1 mg/m3 TWA (as NaN3); 0.3 mg/m3 STEL; Potential for cutaneous absorption

CAS # 26628-22-8

IOELVs

Sodium Azide Possibility of significant uptake through the skin; 0.3 mg/m3 STEL; 0.1 mg/m3 TWA

CAS # 26628-22-8

NIOSH

None established

None established

8.2 Exposure controls

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

Eye Protection Tightly sealed goggles.

Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate

government standards.

Skin Protection Wear protective clothing and impervious gloves, as appropriate.

Respiratory Protection Under normal conditions, the use of this product should not require respiratory

protection.

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State Liquid Specific Gravity ≈ 1.13

(Water=1.0)

Color Brown Solubility

Transparency Clear with brown **Water** Miscible

precipitate

Odor Odorless Organic Not determined pH 6.0 - 8.5 Partition coefficient: Not determined

0.0 - 6.5 Fartition Coefficient. Not determine

n-octanol/water

Freezing Point Not determined Auto-ignition Temp. Not applicable





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9 Physical and Chemical Properties (Continued)

Boiling Point Not determined Decomposition Not determined

Temperature

Flash Point Not applicable Percent Volatiles Not applicable

Evaporation Rate Not determined Vapor Pressure Not determined

Flammability (Solid, Gas) Not applicable Viscosity Not determined

Flammability Limits Not determined

Vapor Density Not determined Oxidizing Properties Not applicable

Odor Threshold Not applicable

9.2 Other Information No further relevant information available.

10 Stability and Reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical StabilityThe product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

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.

10.4 Conditions to AvoidAvoid 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.

11 Toxicological Information

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Sodium Azide Oral LD50 Rat 27 mg/kg CAS # 26628-22-8

Primary Routes of Exposure Eye contact, ingestion, inhalation, and skin contact.

Skin Corrosion/Irritation

Not classified based on available data.

Serious eye damage/eye

Not classified based on available data.

irritation

Respiratory/skin sensitization Not classified based on available data.



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11 Toxicological Information (Continued)

Carcinogenicity No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP,

OSHA or 1272/2008 EC regulation.

Germ cell mutagenicityNot classified based on available data. **Reproductive Toxicity**Not classified based on available data.

Specific target organ toxicity - single exposure

Not classified based on available data.

Specific target organ toxicity - repeated exposure

Not classified based on available data.

Aspiration hazard Not classified based on available data.

Other Information No further relevant information available.

12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species

Sodium Azide 96 h LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 h LC50 Lepomis macrochirus:

CAS # 26628-22-8 0.7 mg/L; 96 h LC50 Pimephales promelas: 5.46 mg/L [□ow-through]

MicrotoxNo information available.Water FleaNo information available.Fresh Water AlgaeNo 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 EffectsThis 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.

13 Disposal Considerations

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, □ush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.



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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.

14 Transport Information

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

14.1 UN/ID Number: Not regulated for transportation

14.2 Shipping Name: Not regulated for transportation

14.3 Hazard Class: Not regulated for transportation

14.4 Packing Group: Not regulated for transportation

14.5 Environmental Hazards: Not regulated for transportation

14.6 Special Precautions for user: None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>US</u> <u>Federal and State Regulations</u>

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 1, low 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)



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Canada

This product does not meet WHMIS criteria for hazardous materials.

PIN Not applicable

Ingredients on Ingredient Disclosure List

Sodium Azide

Ingredients with unknown toxicological properties

None

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.

16 Other Information

Aline Biosciences Safety Rating	Flammability: 0 Health: 1 Reactivity with Water: 0 Physical Contact: 1	Code 0=None 1=Slight 2=Caution 3=Severe
		3=Severe

Revision Changes

Updated Section 3

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.



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16 Other Information (Continued)

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists

ADR and RID - European Agreement Concerning The International Carriage Of

Dangerous Goods By Road and Rail

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

IARC - International Agency for Research on Cancer

IATA DGR - International Air Transport Association Dangerous Goods Regulation

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%

LD50 - Lethal Dose, 50%

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