

SAFETY DATA SHEETS

This SDS packet was issued with item:

078028893

N/A

Material Safety Data Sheet



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: Alkaline Phosphatase (ALP)-IFCC Liquid
Product number: 2173239
Global material number: 12173239122
Business area: Centralized Diagnostics
Product line: Roche/Hitachi
Instrument type: Not applicable

Supplier:
Roche Diagnostics Corporation
9115 Hague Road
Indianapolis, IN 46250
Site Phone Number: 1-800-428-5074

Emergency telephone number:
CHEMTREC:
1-800-424-9300 (U.S. or Canada)
1-703-527-3887 (International)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Description 1: Bottle R2 Substrate

Components	CAS Number	Weight %	OSHA PEL:	OSHA STEL:	ACGIH TLV:	ACGIH STEL:
Magnesium sulfate	7487-88-9	0.01-<0.1	NA	NA	NA	NA
ZINC SULPHATE	7733-02-0	0.01-<0.1	NA	NA	NA	NA
4-Nitrophenyl Phosphate, Disodium Salt	4264-83-9	1-5	NA	NA	NA	NA

3. HAZARDS IDENTIFICATION

Emergency Overview

NFPA Ratings: Health= 1 Flammability= 0 Reactivity= 0 Special= I

Special Definitions: A=Allergen CA=Carcinogen CO=Corrosive F=Flammable H=Harmful I=Irritant Ox=Oxidizer PB=Potential Biohazard
R=Reproductive S=Sensitizer T=Toxic T+=Highly Toxic W=Water Reactive

Principle routes of exposure: Ingestion, inhalation, skin and/or eye contact.

Inhalation: None

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin contact: None

Eye contact: Contact with eyes may cause irritation

Sensitization or Odor threshold: None.

Medical conditions aggravated by exposure: None known

Additional information: None

4. FIRST AID MEASURES

Inhalation: Consult a physician. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Skin contact: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Ingestion: Call a physician immediately. Do not induce vomiting without medical advice.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Notes to physician: None determined

5. FIRE-FIGHTING MEASURES

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use dry chemical, CO₂, water spray or "alcohol" foam.

Unusual hazards: None known.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Evacuate personnel to safe areas. Remove all sources of ignition.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not let product enter drains.

Methods for cleaning up: Never return spills in original containers for re-use. Soak up with oil absorbent material. Sweep up or vacuum (if powder) or soak up with inert absorbent material (if liquid), then place into a suitable clean, dry, closed container, and label for disposal.

7. HANDLING AND STORAGE

Handling: Protect from contamination. Wear personal protective equipment.

Storage: No special precautions required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Not applicable.

Personal Protective Equipment

Respiratory protection: Respiratory protection is not required under normal use of this product. If respiratory protection is needed, follow the OSHA regulation, 29CFR1910.134. Always use a NIOSH approved respirator when necessary.

Hand protection: Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.

Skin and body protection: Wear appropriate body protection to prevent skin contact.

Eye protection: Wear appropriate eye protection to prevent eye contact.

Hygiene measures: When using, do not eat, drink or smoke. Keep away from food and drink. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point/range: No information available

Melting point/range: Not determined

pH: 8.5

Physical state: Liquid.

Flash point: No information available.

LEL (%): Not determined

UEL (%): Not determined

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Hydrogen chloride.

Materials to avoid: Incompatible with strong acids and bases. Oxidising agents (strong).

11. TOXICOLOGICAL INFORMATION

Components	NIOSH - Selected LD50s and LC50s:	NIOSH Pocket Guide - Target Organs:
Magnesium sulfate	=230 mg/kg Oral LD50 Rat	
ZINC SULPHATE	=500 mg/kg Oral LD50 Rat	

Inhalation: No additional data available

Skin: No additional data available

Oral: No additional data available

Product number: 2173239

Page 2 of 4

Product name: Alkaline Phosphatase (ALP)-IFCC Liquid

Mutagenic effects: No data is available on the product itself
Reproductive toxicity: No data is available on the product itself

12. ECOLOGICAL INFORMATION

Bioaccumulation: Not determined
Aquatic toxicity: No data is available on the product itself
Ecotoxicity effects: No data is available on the product itself

U.S. EPA, RCRA, CERCLA, SARA, or DGC information on persistent, bioaccumulative, and toxic chemicals (PBTs):
The following chemicals are listed under the U.S. EPA regulations of RCRA, CERCLA, SARA, or DGC:

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

14. TRANSPORT INFORMATION

Is product hazardous to ship? No.
DOT

Proper shipping name: None	UN Number: Not applicable	Hazard class: Not applicable	Subsidiary risk: Not applicable	Packing group: Not applicable
-----------------------------------	----------------------------------	-------------------------------------	--	--------------------------------------

ICAO/IATA

Proper shipping name: None	UN Number: Not applicable	Hazard class: Not applicable	Subsidiary risk: Not applicable	Packing group: Not applicable
-----------------------------------	----------------------------------	-------------------------------------	--	--------------------------------------

15. REGULATORY INFORMATION

U.S. Regulations:

U.S. CERCLA/SARA/TSCA Regulatory Information: The following chemicals are listed under the following TSCA/SARA/CERCLA lists. Refer to TSCA regulation if you need a definition for acronyms that may be shown in the TSCA Inventory field in the table below

Components	CERCLA/SARA 302 RQ and TPQ (40 CFR 355, App.A)	CERCLA/SARA 304 RQ (40 CFR Table 302.4)	SARA 313 Emission reporting	TSCA Inventory
Magnesium sulfate				Present
ZINC SULPHATE		=454 kg final RQ	Listed	Present
4-Nitrophenyl Phosphate, Disodium Salt				Present

U.S. Clean Water Act (CWA)/ California Proposition 65: The following chemicals are listed under the CWA and/or California Proposition 65:

Components	Clean Water Act Hazardous Substances	Clean Water Act Priority Pollutants	California Proposition 65
ZINC SULPHATE	Present	Present	

Canadian Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Components	Canada - WHMIS: Classifications of Substances:
Magnesium sulfate	Uncontrolled product according to WHMIS classification criteria
ZINC SULPHATE	Uncontrolled product according to WHMIS classification criteria

Product number: 2173239

Page 3 of 4

Product name: Alkaline Phosphatase (ALP)-IFCC Liquid

16. OTHER INFORMATION

Reason for revision: Not applicable
References: None.
Additional advice: None
Prepared by: Roche Diagnostics, Health & Safety Department, MSDS Contact: 317-521-7425 or 317-521-7505

The information, data and recommendations contained herein are based upon information believed by Roche Diagnostics Operations after reasonable investigation and research, to be accurate; however, Roche Diagnostics Operations does not warrant the accuracy of this information. All materials and mixtures may present unknown hazards and should be used with caution. When necessary or appropriate, independent opinions regarding the risk of handling or exposure should be obtained from trained professionals. Roche Diagnostics Operations disclaims any warranty against patent infringement and the implied warranties of merchantability and fitness for a particular purpose. Customer's sole and exclusive remedy shall be replacement of the product or return of the product and refund of the purchase price, at Roche Diagnostics Operations's option. In no case shall Roche Diagnostics Operations be liable for incidental or consequential damages, including lost profits.

End of Safety Data Sheet

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**SECTION 1. IDENTIFICATION**

Product name : ALP
Mat.-No./ Genisys-No. : 12173107122

Manufacturer or supplier's details

Company name of supplier : Roche Diagnostics

Address : 9115 Hague Road
46250 Indianapolis IN

Telephone : 1-800-428-5074

Emergency telephone:

In case of emergencies : CHEMTREC 1-800-424-9300 (U.S. or Canada)
1-703-527-3887 (International)

Recommended use of the chemical and restrictions on use

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit

GHS Label element

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**Other hazards**

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**R1(A / B)****GHS Classification**

Skin irritation

H315: Causes skin irritation.

Category 2

Eye irritation

H319: Causes serious eye irritation.

Category 2A

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (% w/w)
2-Amino-2-methyl-1-propanol	124-68-5	≥ 10 - < 20

R2(C)**GHS Classification**

Not a hazardous substance or mixture.

Hazardous ingredients

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Rinse mouth with water.

Most important symptoms
and effects, both acute and
delayed : No information available.

Notes to physician : The first aid procedure should be established in consultation
with the doctor responsible for industrial medicine.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-
cumstances and the surrounding environment.

Unsuitable extinguishing
media : High volume water jet

Specific hazards during fire
fighting : Do not allow run-off from fire fighting to enter drains or water
courses.

Further information : Collect contaminated fire extinguishing water separately. This
must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must
be disposed of in accordance with local regulations.

Special protective equipment
for fire-fighters : Wear self-contained breathing apparatus for firefighting if nec-
essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec-
tive equipment and emer-
gency procedures : Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages
cannot be contained.

Methods and materials for
containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,
acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against
fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the ap-
plication area.

ALP

Version
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

Technical measures/Precautions : See label, package insert or internal guidelines

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

R1(A / B)**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Ingredients	CAS-No.
2-Amino-2-methyl-1-propanol	124-68-5

R2(C)**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures : No data available

Personal protective equipment

Hand protection

In case of contact through splashing:
Material : Gloves
Break through time : > 480 min
Glove thickness : 0.1 mm

Remarks : Wear appropriate protective gloves to prevent skin contact.
Replace torn or punctured gloves promptly.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES****R1(A / B)**

Appearance	: liquid
Color	: No data available
Odor	: No data available
Odor Threshold	: No data available
pH	: 10.44, (20 °C)
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: No data available
Density	: 1.003 - 1.0053 g/cm3
Solubility(ies)	
Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

SAFETY DATA SHEET



ALP

Version
1.2

Revision Date:
12-16-2015

Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

R2(C)

Appearance	: liquid
Color	: No data available
Odor	: No data available
Odor Threshold	: No data available
pH	: ca. 8.5, (25 °C)
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: No data available
Density	: 1.0 - 1.0175 g/cm3
Solubility(ies)	
Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION**R1(A / B)****Acute toxicity**

Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Acute oral toxicity : LD50 Oral (Rat): 2,900 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Result: Irritating to skin.

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Result: Irritating to eyes.

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Species: Guinea pig

Method: OECD Test Guideline 406

Remarks: Did not cause sensitization on laboratory animals.

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**Germ cell mutagenicity**

Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**Genotoxicity in vitro : Test Type: Ames test
Result: negative**Carcinogenicity**

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

Ingredients:**2-Amino-2-methyl-1-propanol:**

No aspiration toxicity classification

R2(C)**Acute toxicity**

Not classified based on available information.

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**Skin corrosion/irritation**

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**R1(A / B)****Ecotoxicity****Ingredients:****2-Amino-2-methyl-1-propanol:**Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 190 mg/l
Exposure time: 96 hToxicity to daphnia and other : (Daphnia magna (Water flea)): 193 mg/l
aquatic invertebrates Exposure time: 48 h(Daphnia magna (Water flea)): 65 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Toxicity to algae : IC50 (Desmodesmus subspicatus (green algae)): 520 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to bacteria : EC50 (Bacteria): 132 mg/l

Ecotoxicology Assessment
Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available

Persistence and degradability**Ingredients:****2-Amino-2-methyl-1-propanol:**

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 40 %
Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: According to the results of tests of biodegradability
this product is not readily biodegradable.

Biodegradation: 50 %
Exposure time: 28 d
Method: OECD Test Guideline 302

Bioaccumulative potential**Ingredients:****2-Amino-2-methyl-1-propanol:**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-
octanol/water : log Pow: -0.63

Mobility in soil

No data available

Other adverse effects**Ingredients:****2-Amino-2-methyl-1-propanol:**

Additional ecological infor-
mation : Harmful to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.

An environmental hazard cannot be excluded in the event of
unprofessional handling or disposal.

R2(C)**Ecotoxicity**

No data available

ALPVersion
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**Persistence and degradability**

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**R1(A / B)****EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

ALP

Version
1.2Revision Date:
12-16-2015Date of last issue: 12-14-2015
Date of first issue: 11-19-2015**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

2-Amino-2-methyl-1-propanol	124-68-5	10 - 20 %
-----------------------------	----------	-----------

Pennsylvania Right To Know

Water	7732-18-5	70 - 90 %
2-Amino-2-methyl-1-propanol	124-68-5	10 - 20 %

New Jersey Right To Know

Water	7732-18-5	70 - 90 %
2-Amino-2-methyl-1-propanol	124-68-5	10 - 20 %

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

CH INV : The mixture contains substances listed on the Swiss Inventory, Not in compliance with the inventory

2-Methylamino-2-methyl-1-propanol
N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE
Magnesium di(acetate)Tetrahydrate
Zinc sulphate hepta hydrate

SAFETY DATA SHEET



ALP

Version
1.2

Revision Date:
12-16-2015

Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

TSCA	: Not On TSCA Inventory 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE Magnesium di(acetate)Tetrahydrate Zinc sulphate hepta hydrate
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL. 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE Magnesium di(acetate)Tetrahydrate
AICS	: Not in compliance with the inventory 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE
NZIoC	: Not in compliance with the inventory N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE
ENCS	: Not in compliance with the inventory Water 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE Magnesium di(acetate)Tetrahydrate Zinc sulphate hepta hydrate
ISHL	: Not in compliance with the inventory 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE Magnesium di(acetate)Tetrahydrate Zinc sulphate hepta hydrate
KECI	: Not in compliance with the inventory 2-Methylamino-2-methyl-1-propanol N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE Magnesium di(acetate)Tetrahydrate Zinc sulphate hepta hydrate
PICCS	: Not in compliance with the inventory N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE
IECSC	: Not in compliance with the inventory N(2-HYDROXYETHYL)ETHYLENEDIAMINETRIACETIC ACID TRISODIUM SALT, HYDRATE

TSCA list

No substances are subject to a Significant New Use Rule.

SAFETY DATA SHEET



ALP

Version
1.2

Revision Date:
12-16-2015

Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

No substances are subject to TSCA 12(b) export notification requirements.

R2(C)

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Component RQ (lbs)
Sodium hydroxide	1310-73-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium azide	26628-22-8	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Sodium hydroxide	1310-73-2	0.6 %
------------------	-----------	-------

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sodium hydroxide	1310-73-2	0.6 %
------------------	-----------	-------

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Sodium azide	26628-22-8	0 - 0.1 %
--------------	------------	-----------

Pennsylvania Right To Know

SAFETY DATA SHEET



ALP

Version
1.2

Revision Date:
12-16-2015

Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Water	7732-18-5	90 - 100 %
p-NPP, Di-Tris	68189-42-4	5 - 10 %
Sodium hydroxide	1310-73-2	0.1 - 1 %
Sodium azide	26628-22-8	0 - 0.1 %

New Jersey Right To Know

Water	7732-18-5	90 - 100 %
p-NPP, Di-Tris	68189-42-4	5 - 10 %

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

CH INV	: On the inventory, or in compliance with the inventory
TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: Not in compliance with the inventory Water p-NPP, Di-Tris
ISHL	: Not in compliance with the inventory p-NPP, Di-Tris
KECI	: Not in compliance with the inventory p-NPP, Di-Tris
PICCS	: Not in compliance with the inventory p-NPP, Di-Tris
IECSC	: On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

R1(A / B)

GHS Label element

Hazard pictograms :



Signal Word : Warning

SAFETY DATA SHEET



ALP

Version
1.2

Revision Date:
12-16-2015

Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Hazard Statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

R2(C)

GHS Label element

Not a hazardous substance or mixture.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency

SAFETY DATA SHEET

Roche

ALP

Version
1.2

Revision Date:
12-16-2015

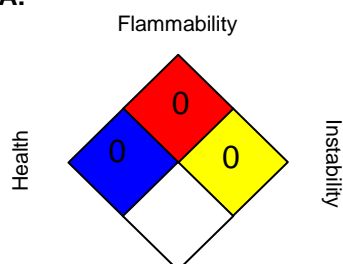
Date of last issue: 12-14-2015
Date of first issue: 11-19-2015

Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

Further information

R1(A / B)

NFPA:



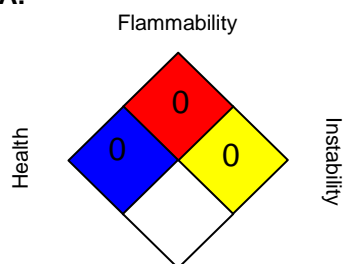
HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

R2(C)

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 12-16-2015

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8