

1. Identification

GHS Product identifier
Mixture identification:
Trade name: Pre Treatment Liquid, T43R2

Recommended use of the chemical and restrictions on use
Recommended use: Pretreatment solution

Supplier's details
Supplier in Australia:
EPSON Australia Pty Limited
Level1, 3 Talavera Road Macquarie Park NSW 2113, Australia
(02) 8899 3666 www.epson.com.au

Supplier in New Zealand:
EPSON New Zealand Pty Limited
7-9 Fanshawe Street, Auckland 1010, New Zealand
(09) 366 6855 www.epson.co.nz

Date: 27/08/2024
Revision: 2.0

Emergency phone number
Australia (02) 8899 3666 (Mon-Fri, 9AM-5PM, AEST)
New Zealand (09) 366 6855 (Mon-Fri, 9AM-5PM, NZST)

2. Hazard identification

Classification of the Hazardous chemical
The product is not classified as dangerous according to GHS - Seventh revised edition.

GHS label elements, including precautionary statements
The product is not classified as dangerous according to GHS - Seventh revised edition.

Hazard pictograms:
None

Hazard statements:
None

Precautionary statements:
None

Special Provisions:
None

Other hazards which do not result in a classification
No other hazards

3. Composition/information on ingredients

Substances
No

Mixtures
Hazardous components within the meaning of GHS and related classification:

Qty	Name	Ident. Number	Classification
>= 80%	Water	CAS: 7732-18-5 EC: 231-791-2	The product is not classified as dangerous according to GHS - Seventh revised edition.
15% ~ 20%	Nitric acid, calcium salt, tetrahydrate	CAS: 13477-34-4	 3.3/1 Eye Dam. 1 H318
0.5% ~ 1%	Triethanolamine	CAS: 102-71-6 EC: 203-049-8 REACH No.: 01-21194864 82-31	The product is not classified as dangerous according to GHS - Seventh revised edition.

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Symptoms caused by exposure

None

Medical attention and special treatment

Treatment:

None

5. Fire-fighting measures

Suitable extinguishing media

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties: No data available

Oxidizing properties: No data available

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

Methods and material for containment and cleaning up

Wash with plenty of water.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring

Triethanolamine - CAS: 102-71-6

- OEL Type: ACGIH - TWA(8h): 5 mg/m³

DNEL Exposure Limit Values

Triethanolamine - CAS: 102-71-6

Worker Industry: 6.3 mg/kg/day - Consumer: 3.1 mg/kg/day - Exposure: Human Dermal

- Frequency: Long Term, systemic effects

Worker Industry: 5 mg/m³ - Consumer: 1.25 mg/m³ - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects

Consumer: 13 mg/kg/day - Exposure: Human Oral - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values

Triethanolamine - CAS: 102-71-6

Target: Fresh Water - Value: 0.32 mg/l

Target: Marine water - Value: 0.032 mg/l

Target: Freshwater sediments - Value: 1.7 mg/kg

Target: Marine water sediments - Value: 0.17 mg/kg

Target: Soil (agricultural) - Value: 0.151 mg/kg

Appropriate engineering controls

None

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use personal protective equipment as required.

Protection for skin:

Use personal protective equipment as required.

Protection for hands:

Use personal protective equipment as required.

Respiratory protection:

Use personal protective equipment as required.

Thermal Hazards:

None

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:

Liquid

Colour:

White

Odour:

Slightly

Melting point / freezing point:

No data available

Boiling point or initial boiling point and boiling range:

No data available

Flammability:

Non-flammable

Lower and upper explosion limit:

No data available

Flash point:

Does not flash.

Auto-ignition temperature:

No data available

Decomposition temperature:

No data available

pH:

8.4 ~ 9.6 at 20 °C

Kinematic viscosity:

No data available

Vapour pressure:

No data available

Relative vapour density:

No data available

Particle characteristics:	Not Relevant
Other information	
Viscosity:	< 5 mPa·s at 20 °C

10. Stability and reactivity

Reactivity
Stable under normal conditions
Chemical stability
Stable under normal conditions
Possibility of hazardous reactions
None
Conditions to avoid
Stable under normal conditions.
Incompatible materials
None in particular.
Hazardous decomposition products
None.

11. Toxicological information

Toxicological information of the product:
c) serious eye damage/irritation:
Test: Eye Irritant - Species: OECD test Guideline No.491 Non-irritant
f) carcinogenicity:
Does not contain carcinogens (Ref. 1)
g) reproductive toxicity:
Does not contain reproductive toxicity and developmental toxic substances (Ref. 2)
Toxicological information of the main substances found in the product:
Triethanolamine - CAS: 102-71-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982Vol. -, Pg. 114, 1982.
Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10, 1989.

If not differently specified, the information listed below must be considered as N.A.::

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

12. Ecological information

Ecotoxicity
Adopt good working practices, so that the product is not released into the environment.
Toxicological information of the product:
No data available
Toxicological information of the main substances found in the product:
No data available
Persistence and degradability

No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available
Other adverse effects
None

13. Disposal considerations

Disposal methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport information

UN number
Not classified as dangerous in the meaning of transport regulations.
UN proper shipping name
No data available
Transport hazard class(es)
No data available
Packing group, if applicable
No data available
Environmental hazards
No data available
Special precautions for user
No data available
Additional Information
No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question
This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals
Australia Information:
Statement of Hazardous Nature:
the Industrial Chemicals (Notification and Assessment) Act 1989 (Cwlth), including listing on the Australian Inventory of Chemical Substances (AICS), any condition of use associated with the listing on the AICS and/or whether any chemical or a chemical in the product is being introduced under a permit.
New Zealand Information:
Hazardous Substances and New Organisms Act 2020:
Not regulated

16. Other information

Full text of phrases referred to in Section 3:
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Safety Data Sheet dated August 27, 2024, Revision: 2.0
Paragraphs modified from the previous revision:
1. Identification
2. Hazard identification

- 3. Composition/information on ingredients
- 7. Handling and storage
- 8. Exposure controls/personal protection
- 9. Physical and chemical properties
- 11. Toxicological information
- 12. Ecological information
- 14. Transport information
- 15. Regulatory information
- 16. Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

- Ref. 1 ·IARC Monographs on the Evaluation Carcinogenic Risks to Humans (IARC:
International Agency for Research on Cancer)
·Journal of Occupational Health (JOH) (Japan Society of Occupational Health (JSOH))
·TLVs and BEIs (ACGIH: American Conference of Governmental Industrial Hygienists)
·IRIS Carcinogenic Assessment (IRIS: Integrated Risk Information System of US EPA)
·National Toxicology Program (NTP) Report on Carcinogens (USA)
·Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL of 16 December 2008 on classification, labelling and
packaging of substances and mixtures, amending and repealing Directives 67/548/EEC
and 1999/45/EC, and amending Regulation (EC) No 1907/2006
·MAK und BAT Werte Liste (DFG: German Research Foundation)
·TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder
reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)
- Ref. 2 ·Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL of 16 December 2008 on classification, labelling and
packaging of substances and mixtures, amending and repealing Directives 67/548/EEC
and 1999/45/EC, and amending Regulation (EC) No 1907/2006
·TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder
reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.
SUSMP:	SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons