MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Nitric Acid 15%, 10%, 5% solution
Product Code: REA209, REA208, REA210
Brand: Solmedia Ltd

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

Identified uses: PC21 Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Solmedia Ltd.
Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
Telephone: 0844 80 80 900
Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone: +44 (0)844 80 80 900

SECTION 2: Hazard's identification

2.1 Classification of the substance or mixture

Classification under CLP: Regulation (EC) No. 1272/2008 [CLP]

Hazard Class	Hazard Category	Hazard Statement
Skin corrosion	Category 1A	H314
Serious eye damage	Category 1	H318

Most important adverse effects:

Causes severe skin burns and eye damage.

2.2 Label elements

Hazard statements: H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

Precautionary Statement(s):

P260: Do not breathe dust or mists.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 +P330 +P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 +P361 +P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 +P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTRE or doctor/physician.

P363: Wash contaminated clothing before reuse.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local requirements.

2.3 Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.1 Substances

Nitric acid

Molecular weight: 63.01 g/mol

Formula: HNO3

3.2 Mixtures

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

		Classification

			(Regulation (EC) No 1272/2008 [CLP]	
Hazardous Components		Amount [%]	Hazard class/ Hazard category	Hazard Statements
Name:	Nitric acid	5-15%	SKIN CORR. CAT 1A. EYE DAM. CAT. 1.	H314 H318
CAS NO.	7697-37-2			
EC-NO.	231-714-2			
Name:	Deionised water	85-95%	N/A	N/A
CAS NO.	7732-18-5			
EC-NO.	231-791-2			

SECTION 4: First aid measures

4.1 Description of first aid measures

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing all contaminated clothes and footwear, wash using soap. Get medical attention immediately. Transfer to hospital if there are burns or symptoms of poisoning.

Eye Contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: **Do not induce vomiting.** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately. Transfer to hospital as soon as possible.

Inhalation: Move casualty to fresh air and keep at rest. If breathing is difficult or becomes bubbly, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately, Transfer to hospital as soon as possible.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: May be harmful if absorbed through the skin. Causes skin irritation.

Eye contact: Causes serious eye irritation and damage.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Delayed / immediate effects:

Immediate effects can be expected after short-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Eye bathing equipment should be available on the premises.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

Corrosive. In combustion emits toxic fumes (Nitrogen Oxides).

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing including eye protection and boots.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

6.3 Methods and materials for containment and cleaning up

Neutralize spill with sodium bicarbonate or lime. Absorb spill with non-combustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and clean up materials in accordance with local regulations.

6.4 Reference to other sections

See also Section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure there is sufficient ventilation of the area. Wash thoroughly after using. Keep container closed when not in use.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated area. Keep container tightly closed. Keep away from incompatible materials.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Hazardous Ingredients

Nitric Acid

Exposure Limits	Basis	Entity
2 ppm 5.2 mg/m³	TLV	ACGIH
4 ppm 10 mg/m³	STEL	ACGIH
2 ppm 5 mg/m³	PEL	OSHA
2 ppm 5 mg/m³	REL	NIOSH
4 ppm 10 mg/m³	STEL	NIOSH
25 ppm	IDLH	OSHA

TWA: Time Weighted Average over 8 hours of work
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL. Ceiling

8.2 Exposure controls

Engineering measures: Ensure adequate ventilation. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Respiratory Protection: Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

Hand Protection: Wear nitrile or rubber gloves. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Eye Protection: Wear chemical safety glasses or goggles, and face shield.

Skin Protection: Impermeable full protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: Do not let product enter drains. Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid.
Colour: Colourless
Odour: Not available
pH: Not available
Melting/freezing point:
Not available
Initial boiling point and boiling range:
100°C (212°F)
Flash point: Not flammable
Evaporation rate: Not available
Flammability (solid, gas):
Not flammable
Upper/lower flammability or exposure limit:
Not explosive
Vapour pressure: 123 hPa (17 mmHg) at 20°C (68°F)
Vapour density: Not available
Density: 1.15g/cm³ at 20°C (68°F)
Solubility (ies): Soluble in water.
Partition coefficient: n-octanol/water:
Not available
Auto-ignition temperature:
Not available
Decomposition temperature:
Not available

9.2 Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

May discolour on exposure to air and light.

10.5 Incompatible materials

Alkali metals, organic materials, acetic anhydride, acetonitrile, alcohols, acrylonitrile.

10.6 Hazardous decomposition products

Nitrogen oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity

Nitric Acid

Skin contact:	Not available
Eye contact:	Not available
Inhalation:	Not available
Ingestion:	LDLO Oral – Human – 430 mg/kg

Carcinogenicity

IARC:	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Symptoms / routes of exposure

Skin contact:	Itching, swelling, redness, burning.
Eye contact:	Itching, redness, burning, watering eyes.
Ingestion:	Burning, choking, nausea, vomiting, pain.
Inhalation:	Burning, choking, shortness of breath, coughing, wheezing, dizziness.

Chronic Toxicity:	Not available.
Teratogenicity:	Tetotoxicity (except death)
Mutagenicity:	Not available.
Embryotoxicity:	Tetotoxicity (except death)
Specific Target Organ Toxicity:	Not available.
Reproductive Toxicity:	Not available.
Respiratory/Skin Sensitization:	Not available.

SECTION 12: Ecological information

12.1 Toxicity

Nitric Acid

Aquatic Vertebrate:	LC50 – Gambusia affinis – 72 mg/L – 96h
Aquatic Invertebrate:	Not available
Terrestrial:	Not available

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

Not available.

12.6 Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1 UN number

2031

14.2 UN proper shipping name

ADR/RID: NITRIC ACID

IMDG: NITRIC ACID

IATA: Nitric acid

14.3 Transport hazard class(es)

8

14.4 Packaging group

II

14.5 Environmental hazards

No

Marine pollutant: No

14.6 Special precautions for user

No special precautions.

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and 3:

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.