MATERIAL SAFETY DATA SHEET

1. Identification of the substance or preparation and the company/undertaking

Product Name: Mercury Standard (20 mg/L Hg) or Plating Solution (20 mg/L Hg)

Product number: R-300-025PLA-HG, R-300-20STHG-01

company: Lab21 Environmental Ltd
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UK
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2. Composition/information on ingredients

Product name: Mercury Standard or Plating Solution; 20 mg/L Hg in 2% Nitric Acid.

CAS number: none EC number: none

Hazardous Ingredients	Proportion	CAS-No	EC-No
Nitric acid	2.0%	7697-37-2	231-714-2

Symbol: O, C
R-phases: R8-35
Contact with combustible material may cause fire. Causes severe burns.

Mercury nitrate	<0.01%	10045-94-0	233-152-3

Symbol: T + N
R-phases: R26/27/28-33-50-53
Very toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

3. Hazards identification

Irritating to eyes and skin.

4. First aid measures

If swallowed: Wash out mouth thoroughly providing person is conscious. Do not induce vomiting. Seek medical advice.

After eye contact: Irrigate thoroughly with water for at least 15 minutes. If discomfort persists obtain medical attention.

After skin contact: Remove contaminated clothing. Wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Launder clothing before reuse.

If inhaled: Remove individual from contaminated air, rest and keep warm. If breathing is difficult give oxygen and seek medical assistance.

5. Fire-fighting measures

Not combustible. May evolve toxic fumes in fire.
Fire fighters should wear self contained breathing apparatus if exposure to fumes is likely.
Use water spray or foam to control fire situation if compatible with other chemical products in the vicinity.

6. Accidental release measures

Wear protective clothing when dealing with spills. Neutralise with sodium bicarbonate. Absorb spills with sand or vermiculite. Ventilate area and wash spill site after material pickup is complete. Dispose of in accordance with local regulations.

7. Handling and storage

Handling: Do not breathe vapour. Do not get in eyes, on skin or clothing. Change contaminated clothing. Wash hands after working with substance. Avoid prolonged or repeated exposure. Do not empty into drains.

Storage: Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices. Solution is acidic and may corrode metals.

8. Exposure controls and personal protection

UK Exposure Limits:
Nitric Acid: 10 mg/m^3 Short term (4 ppm) & 5.2 mg/m^3 long-term (2 ppm) (WEL)
Mercury inorganic compounds (as Hg): 0.025 mg/m^3 long term (10 ppb) (WEL)

Engineering Controls:
Always use this product with good general ventilation (10-15 changes of air in the room per hour) or preferably in a chemical fume hood. Maintain atmospheric concentrations as low as possible.

Personal Protection:
Avoid all skin and eye contact. Wear protective clothing including safety glasses and rubber or PVC gloves. Never pipette by mouth.

9. Physical and chemical properties

Appearance:	Clear colourless Liquid
Boiling point (ºC):	100 (approx)
Vapour pressure (mmHg at 20ºC):	25 (approx)
Specific Gravity (g/mL):	1.0
Flash Point (ºC):	Not flammable
Flammability limits (%):	Not flammable
Solubility in water (g/L):	Completely miscible

Other Properties: pH approx 1. Acidic solution. Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

10. Stability and reactivity

Substances to be avoided: Metals, bases

Hazardous decomposition products: Nitrous gases

11. Toxicological information

After ingestion: May cause irritation of mouth, throat, oesophagus and gastrointestinal tract.
After skin contact: May cause irritation.
After eye contact: May cause irritation.
After inhalation: May cause irritation of mucous membranes, coughing, and dyspnoea.

12. Ecological information

Harmful to aquatic organisms.
May cause long-term adverse effects in the aquatic environment.
Do not allow to enter drinking water supplies, waste water or soil.

13. Disposal considerations

Contact a licensed professional waste disposal service to dispose of this material. Observe local and national environmental regulations.

14. Transport information

This product contains less than 5% of the following ingredient
NITRIC ACID, C (corrosive)
UN no: 2031, Class 8

Non – Hazardous for air, road and sea transport.

15. Regulatory information

Labelling according to EC directives

Symbol(s): Xi Irritant
R phases: 36/38
Irritating to eyes and skin.
S phases: 26
In case of contact with eyes, wash immediately with plenty of water and seek medical advice.

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

16. Other information

None

All information given by the Company is offered in good faith and is believed to the best of our knowledge to be accurate. However this information is offered without warranty representation inducement or licence and the Company does not assume legal responsibility for reliance upon the same.
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