### NICKEL (NI) ICP STANDARD SOLUTION 1 GM/L IN DILUTE HNO3 TRACEABLE TO NIST MSDS

### CAS No: MSDS



### MATERIAL SAFETY DATA SHEET (MSDS)

<b>SECTION 1: Identificatio</b>	n of the substance/mixture and of the company/undertaking
1.1. Product identifie	
Product form	: Mixture
	:
Product code	: I141N
1.2. Relevant identifi	ed uses of the substance or mixture and uses advised arginst
	ed uses of the substance or mixture and uses advised against
<b>1.2.1.</b> Relevant identifit Use of the substance/mixt	
Use of the substance/mixt	ure : Laboratory chemicals, Manufacture of substances
1.2.2. Uses advised ag	ainst
No additional information a	
1.3. Details of the su Labogens Fine Chem Indu	pplier of the safety data sheet
1st Floor , Above Bank of Ludhiana Pb. (141007) +91 9316777775, +91 770 sales@labogens.com - v	
1.4. Emergency telep	phone number
Emergency number	: +91 7707855700 (9:00am - 6:00 pm)
SECTION 2: Hazards ide	ntification
	the substance or mixture
Classification according	to Regulation (EC) No. 1272/2008 [CLP]
Skin corrosion/irritation,	H315
Category 2 Serious eve damage/eve	H310
Category 2 Serious eye damage/eye irritation, Category 2	H319
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin,	H319 H317
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin, category 1 Carcinogenicity	
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin, category 1 Carcinogenicity (inhalation) Category 1B	H317 H350i
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin, category 1 Carcinogenicity (inhalation) Category 1B Reproductive toxicity,	H317
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin, category 1 Carcinogenicity (inhalation) Category 1B Reproductive toxicity, Category 1A Specific target organ	H317 H350i
Serious eye damage/eye irritation, Category 2 Sensitisation — Skin, category 1 Carcinogenicity (inhalation) Category 1B Reproductive toxicity, Category 1A	H317 H350i H360D

Full text of classification categories and H statements : see section 16

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#### Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements	
Labelling according to Regulation (EC) N Hazard pictograms (CLP)	0. 1272/2008 [CLP]
	GHS07 GHS08
Signal word (CLP)	: Danger
Hazard statements (CLP)	<ul> <li>H315 - Causes skin irritation</li> <li>H317 - May cause an allergic skin reaction</li> <li>H319 - Causes serious eye irritation</li> <li>H350i - May cause cancer by inhalation</li> <li>H360D - May damage the unborn child</li> <li>H373 - May cause damage to organs through prolonged or repeated exposure</li> <li>H412 - Harmful to aquatic life with long lasting effects</li> </ul>
Precautionary statements (CLP)	<ul> <li>P201 - Obtain special instructions before use</li> <li>P273 - Avoid release to the environment</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P308+P313 - IF exposed or concerned: Get medical advice/attention</li> </ul>

### 2.3. Other hazards

No additional information available

# SECTION 3: Composition/information on ingredients 3.1. Substance Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	75 - 99	Not classified
Nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	1 - 5	Ox. Liq. 1, H271 Skin Corr. 1A, H314

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Nickel	(CAS No) 7440-02-0 (EC no) 231-111-4 (EC index no) 028-002-00-7	0.01 - 1	STOT RE 1, H372 Carc. 2, H351 Skin Sens. 1, H317 Aquatic Chronic 3, H412
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Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measure	2
First-aid measures after inhalation	: Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Get medical advice/attention.
4.2. Most important symptoms and e	effects, both acute and delayed
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
4.3. Indication of any immediate med	dical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	e substance or mixture
No additional information available	
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measure	S
C.4. Demonstrations much office	
	e equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
· · ·	
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for contai	nment and cleaning up
Methods for cleaning up	: On land, sweep or shovel into suitable containers. Collect spillage.

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6.4. Reference to other sections No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/persona	I protection
8.1. Control parameters	
o.i. Control parameters	

No additional information available

8.2. Exposure control	ols
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Skin and body protection

: Wear suitable protective clothing

SECTION 9: Physical and chemical prop	perties
9.1. Information on basic physical a	Ind chemical properties
Physical state	: Liquid
Colour	: Clear green.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available

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Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactio	ns
No additional information available	
10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
No additional information available	
40.0 Herendeus desembles and	under .
10.6. Hazardous decomposition prod No additional information available	ucts
SECTION 11: Toxicological information	
11.1. Information on toxicological effe	
Acute toxicity	: Not classified
/ oute toxicity	
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer by inhalation.
Reproductive toxicity	: May damage the unborn child.

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Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information
12.1. Toxicity
No additional information available
12.2. Persistence and degradability
No additional information available
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Other adverse effects
No additional information available
SECTION 13: Disposal considerations
13.1. Waste treatment methods
No additional information available
SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN numb	er	
UN-No. (ADR)	:	3264
UN-No. (IMDG)	:	3264
UN-No.(IATA)	:	3264
UN-No.(ADN)	:	Not regulated
UN-No. (RID)	:	Not regulated

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14.2. UN proper shipping name			
Proper Shipping Name (ADR)	: CORROSIVE LIQUID, ACID	C, INORGANIC, N.O.S.	
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, ACID	C, INORGANIC, N.O.S.	
Proper Shipping Name (IATA)	: CORROSIVE LIQUID, ACID	C, INORGANIC, N.O.S.	
Proper Shipping Name (ADN)	: Not regulated		
Proper Shipping Name (RID)	: Not regulated		
Transport document description (ADR)	: UN 3264 CORROSIVE LIQU	ID, ACIDIC, INORGANIC, N.O.S., 8, III, (	E)
Transport document description (IMDG)		ID, ACIDIC, INORGANIC, N.O.S., 8, III, I	
Transport document description (IATA)		ID, ACIDIC, INORGANIC, N.O.S., 8, III	
14.3. Transport hazard class(es)			
Transport hazard class(es) (ADR) Danger labels (ADR)	: 8 : 8		
	: Â		
	8		
	. 0		
Transport hazard class(es) (IMDG) Danger labels (IMDG)	: 8 : 8		
ΙΑΤΑ			
Transport hazard class(es) (IATA)	: 8		
Hazard labels (IATA)	: 8		
ADN			
Transport hazard class(es) (ADN)	: Not regulated		
RID			
Transport hazard class(es) (RID)	: Not regulated		
14.4. Packing group			
Packing group (ADR)	: 111		
Packing group (IMDG)	: 111		
Packing group (IATA)	: 111		
Packing group (ADN)	: Not regulated		
Packing group (RID)	: Not regulated		
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14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: Yes (IMDG only)
Other information	: No supplementary information available
14.6. Special precautions for user	
- Overland transport	
Classification code (ADR)	: C1
Special provision (ADR)	: 274
Limited quantities (ADR)	: 5L
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	<u>80</u> <u>3264</u>
Tunnel restriction code (ADR)	: E
EAC code	: 2X
APP code	: B
- Transport by sea	
Special provision (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
MFAG-No	: 154
- Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852

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PCA max net quantity (IATA)

: 5L

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CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provision (IATA)	:	A3
ERG code (IATA)	:	8L

#### - Inland waterway transport

Not regulated

- Rail transport

Not regulated

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

Not applicable

#### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference	: Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Denmark

Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product
	Pregnant/breastfeeding women working with the product must not be in direct contact with the product
	The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

No additional information available

#### SECTION 16: Other information

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#### Full text of H- and EUH-phrases:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1B	Carcinogenicity (inhalation) Category 1B
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Repr. 1A	Reproductive toxicity, Category 1A
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H271	May cause fire or explosion; strong oxidiser
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H350i	May cause cancer by inhalation
H351	Suspected of causing cancer
H360D	May damage the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product