Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.06.2013 **Version number 1** **Revision: 25.06.2013**

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

· **Product identifier**

· **Trade name: Ni-Nanoxide N/SP**

· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the preparation :** Preparation

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
SOLARONIX SA
Rue de l'Ouriette 129, CH-1170 Aubonne, Switzerland
info@solaronix.com
T +41 21 821 22 80
www.solaronix.com
F +41 21 821 22 89
info@solaronix.com

· **Emergency telephone number:**
France (ORFILA 24h/24) - Tel : +33 (0)1 45 42 59 59
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

2 Hazards identification

· **Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008 :**


GHS08 health hazard

Carc. 1A H350i May cause cancer by inhalation.
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC :**


T; Toxic

R49-48/23: May cause cancer by inhalation. Toxic: danger of serious damage to health by prolonged exposure through inhalation.


Xi; Irritant

R38: Irritating to skin.


Xi; Sensitising

R43: May cause sensitisation by skin contact.

· **Information concerning particular hazards for human and environment:**
The product has to be labelled in the latest valid version according to the calculation procedure of the "General Classification guideline for preparations of the EU" .

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· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**
nickel monoxide
· **Hazard statements**
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H350i May cause cancer by inhalation.
H372 Causes damage to organs through prolonged or repeated exposure.
Restricted to professional users.
· **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
P264 Wash thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P321 Specific treatment (see on this label).
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**		
CAS: 8000-41-7	terpinéol (mélange d'isomères) Xi R38 Skin Irrit. 2, H315	50-100%
CAS: 1313-99-1 EINECS: 215-215-7	nickel monoxide T R49-48/23; Xi R43 R53 Carc. Cat. 1 Carc. 1A, H350i; STOT RE 1, H372; Skin Sens. 1, H317; Aquatic Chronic 4, H413	10-25%
CAS: 7697-37-2 EINECS: 231-714-2	nitric acid C R35; O R8 Met. Corr.1, H290; Skin Corr. 1A, H314	≤1%

· **Additional information:** For the wording of the listed risk phrases, refer to section 16.

4 First aid measures

· **Description of first aid measures**
· **After excessive inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient in a stable laying down side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** If symptoms persist consult a doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed :**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed :**
No further relevant information available.

5 Firefighting measures

· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture :**
No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures :** Not required.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections :**
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling :**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
· **Information about fire - and explosion protection:** Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.
· **Specific end use(s) :** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see section 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
1313-99-1 nickel monoxide (10-25%)	
WEL (Great Britain)	Long-term value: 0.5 mg/m³ as Ni
7697-37-2 nitric acid (≤1%)	
WEL (Great Britain)	Short-term value: 2.6 mg/m³, 1 ppm
IOELV (EU)	Short-term value: 2.6 mg/m³, 1 ppm

· **Additional information:**
As a basis for the production of this document, the most current valid lists were used.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from food, beverages and petfood.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid all contact with the skin.
Avoid contact with the eyes and skin.

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· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Gloves material :**
The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked before use.

· **Eye protection:** Goggles recommended during refilling

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Colour:	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not self igniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density:**	Not determined.
· **Relative density :**	Not determined.

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· **Vapour density :**	Not determined.
· **Evaporation rate :**	Not determined.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Segregation coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
VOC (EC)	0.00 %
· **Other information :**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions :** No dangerous reactions known.
· **Conditions to avoid :** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **On the skin:** Irritant to skin and mucous membranes.
· **On the eyes:** No irritant effect.
· **Sensitization:** Sensitization possible through skin contact.
· **Additional toxicological information:**
The product shows the following hasards according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
Carcinogenic if inhaled.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability :** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential :** No further relevant information available.
· **Mobility in soil :** No further relevant information available.

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· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects :** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation :**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**	
· **ADR, IMDG, IATA**	UN3289
· **UN proper shipping name**	
· **ADR**	3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (nickel monoxide, NITRIC ACID)
· **IMDG, IATA**	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (nickel monoxide, NITRIC ACID)
· **Transport hazard class(es)**	
· **ADR**	

· **Class**	6.1 (TC3) Toxic substances.
· **Label**	6.1+8
· **IMDG, IATA**	

· **Class**	6.1 Toxic substances.
· **Label**	6.1+8

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· **Packing group**	
· **ADR, IMDG, IATA**	II
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Toxic substances.
· **Danger code (Kemler):**	68
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Acids
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	100 ml
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **UN "Model Regulation":**	UN3289, TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (nickel monoxide, NITRIC ACID), 6.1 (8), II

15 Regulatory information

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H350i May cause cancer by inhalation.
H372 Causes damage to organs through prolonged or repeated exposure.
H413 May cause long lasting harmful effects to aquatic life.

R35 Causes severe burns.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R49 May cause cancer by inhalation.
R53 May cause long-term adverse effects in the aquatic environment.
R8 Contact with combustible material may cause fire.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

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GHS: Globally Harmonized System of Classification and Labelling of Chemicals
VOC: Volatile Organic Compounds (USA, EU)