

SAFETY DATA SHEET

NST INOX pickling bath

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

1.1. Product identifier

Product name NST INOX pickling bath

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

Applications Pickling bath.

1.3. Details of the supplier of the safety data sheet

Supplier Norsk Sveiseteknikk AS
Postboks 575
NO-3002 Drammen, Norway
Tel: +47 99 27 80 00
Fax: +47 32 82 90 19
Contact person Eyvind Røed (E-mail: eyvind@nst.no)

1.4. Emergency telephone number

Emergency telephone number Emergency Telephone Number: +44 08 45 46 47 (24 hour telephone) - 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Symbol(s)



Contains nitric acid
hydrogen fluoride

2.2. Label elements

Risk phrases

R-35 Causes severe burns.
R-26/27/28 Also very toxic by inhalation, in contact with skin and if swallowed.

Safety phrases

S-1/2 Keep locked up and out of reach of children.
S-23 Do not breathe gas/vapour/aerosol mist.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-27 Take off all contaminated clothing immediately.
S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S-7/9 Keep container tightly closed and in a well ventilated place.

CLP

Hazard pictograms

**Signal word**

Danger

Hazard statements

Acute Tox. 2: H300 Fatal if swallowed.
 Acute Tox. 2: H310 Fatal in contact with skin.
 Acute Tox. 2: H330 Fatal if inhaled.
 Skin Corr. 1A: H314 Causes severe skin burns and eye damage.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 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.

2.3. Other hazards**Meets the criteria for vPvB**

No.

Meets the criteria for PBT

No.

Other hazards which do not contribute to classification

No known risks.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Ingredients**

Name	EC No.	CAS No.	Content	Symbol	Classification
nitric acid	231-714-2	7697-37-2	35-40 %	C ,O	R-8, R-35
hydrogen fluoride	231-634-8	7664-39-3	10-15 %	T+ ,C	R-26/27/28, R-35

CLP

Name	REACH No.	Content	Symbol	Classification	CAS No.
nitric acid		35-40 %	GHS05, GHS03, , Danger	Ox. Liq. 3: H272, Skin Corr. 1A: H314	7697-37-2
hydrogen fluoride		10-15 %	GHS06, GHS05, , Danger	Acute Tox. 2: H300, Acute Tox. 1: H310, Acute Tox. 2: H330, Skin Corr. 1A: H314	7664-39-3

Section 16 contains detailed classification phrases.

SECTION 4: First aid measures**4.1. Description of first aid measures****General**

Remove victim immediately from source of exposure. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed**4.3. Indication of any immediate medical attention and special treatment needed**

Inhalation	General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.
Ingestion	DO NOT induce vomiting. Get medical attention immediately. Rinse nose, mouth and throat with water. Rinse mouth thoroughly.
Skin	Remove contaminated clothing. Wash skin with soap and water. Contact physician if irritation continues.
Eyes	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention. Chemical burns must be treated by a physician.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Extinguishing media	Water spray, foam, dry powder or carbon dioxide. Larger fires: Alcohol resistant foam. Water spray.
Special fire fighting procedures	Avoid breathing fire vapours. Containers close to fire should be removed or cooled with water.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Not flammable according to national regulations concerning flammable goods.
Hazardous combustion products	Fire or high temperatures create: Nitrous gases (NOx). Hydrogen fluoride (HF). Corrosive gases/vapours/fumes.

5.3. Advice for firefighters

Protective measures in fire	Firefighters exposed to combustion gases/decomposition products should use a respiratory protective device.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal protection	Ventilate the area and avoid breathing vapours. Avoid contact with skin, eyes and inhalation of vapours. Use requisite protective equipment - refer to section 8. Keep public away from danger area.
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6.2. Environmental precautions

Environmental protection	Runoff or release to sewer, waterway or ground is forbidden.
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6.3. Methods and material for containment and cleaning up

Spill cleanup methods	Neutralise spilled material with crushed limestone, soda ash or lime. Collect for reclamation or absorb in vermiculite, dry sand or similar material. Collect spilled material in appropriate container and deliver for disposal. Do not use sawdust or other combustible material.
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6.4. Reference to other sections**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Usage precautions	Avoid spilling, skin and eye contact. Eye wash facilities and emergency shower must be available when handling this product.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep in cool, dry, ventilated storage and closed containers. Protect from light, including direct sunrays. Keep away from heat, sparks and open flame. Store separated from: Organic substances. Alkalies. Alkalis. Oxidising material - Keep away from flammable and combustible materials.
Storage criteria	Toxic storage. Corrosive storage.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
nitric acid	7697-37-2	WEL.		1 / 2.6 ppm/mg/m3	
hydrogen fluoride	7664-39-3	WEL.	1.8 / 1.5 ppm/mg/m3	3 / 2.5 ppm/mg/m3	

Ingredient comments

WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic, Senz= Sensitisers, Mut= Carcinogenic

Protective equipment



Process conditions

Provide eyewash station.
Shower near the workplace.

8.2. Exposure controls

Respirators

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment (type Gas filter A, Brown).

Protective gloves

For exposure < 8 hours use gloves made of: Polyethylene. Polyvinyl chloride (PVC). Breakthrough time is not known, shift gloves often.

Eye protection

Use approved safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygienic work practices

Promptly remove non-impervious clothing that becomes wet. Wash promptly if skin becomes contaminated.
Wash at the end of each work shift and before eating, smoking and using the toilet.

DNEL

No data.

PNEC

No data.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Fluid.

Colour

Colourless.

Odour

Stinging.

Solubility description

Soluble in water.

Boiling point (°C, interval)

105

Trykk:

Density (g/cm3)

1,15 - 1,20

Temperatur (°C):

pH-value, conc. solution

0

Decomposition temp. (°C)

>105

9.2. Other information

Safety information

Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

No incompatible groups noted.

10.2. Chemical stability

Stable at recommended storage and handling conditions.
Will decompose at temperatures exceeding boiling point.

10.3. Possibility of hazardous reactions

Hazardous polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid strong heating. Exotherm reaction with alkalies and bases.
Reacts strongly with alkaline metals and metal powder.

10.5. Incompatible materials

Materials to avoid

Alkalies. Organic compounds (e.g. wood, textiles, paper). Alkali metals. Massive, solid metal. Powdered metal.

10.6. Hazardous decomposition products

Hazardous decomp. products

No hazardous decomposition products when used at recommended use and storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Sensitization

No allergic reaction is known.

Genotoxicity

No known heritable or mutagenic effects.

Carcinogenicity

This substance has no evidence of carcinogenic properties.

Reproduction toxicity

No known hazardous effects on reproduction, fertility or to the unborn child.

Inhalation

Very toxic by inhalation. May cause burns.

Ingestion

Very toxic if swallowed.
Strongly corrosive. Even small amounts may cause very severe internal damage and may be fatal.

Skin

Very toxic in contact with skin.
Strongly corrosive. May cause deep tissue damage.

Eyes

Causes severe burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight. Immediate first aid is necessary.

Route of entry

Skin and/or eye contact. Ingestion.

COMPONENT:

nitric acid

Toxicology data

Acute toxicity. LDLo. Oral. Human. 430 mg/kg

Toxic conc. - LC50:

0,18 mg/l/4h (inhalation rat)

COMPONENT:

hydrogen fluoride

Toxic dose - LD50:

33 - 57 mg/kg (oral rat)

Toxic conc. - LC50:

1,059 (i h.) mg/l (inh-rat)

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.
Not regarded as dangerous for the environment.

12.2. Persistence and degradability

The product is potentially degradable.

12.3. Bioaccumulative potential

Not relevant, inorganic components.

12.4. Mobility in soil

Mobility

The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

PTB/vPvB

No data.

12.6. Other adverse effects

No known adverse affects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General/cleaning

Waste is classified as hazardous waste.

Disposal methods

Confirm disposal procedures with environmental engineer and local regulations.

Waste class

19 02 05* sludges from physico/chemical treatment containing dangerous substances

The given EWC-code is a guiding, and the code depends on how the waste is formed. User must evaluate the choice of correct code.

Contaminated packaging

Dispose empty packaging in accordance with federal, state and local regulations.

SECTION 14: Transport information

Label for conveyance



ROAD TRANSPORT (ADR):

14.1. UN number

UN no. road 2922

UN no. sea 2922

UN no., air 2922

14.2. UN proper shipping name

Proper shipping name (national)

CORROSIVE LIQUID, TOXIC, N.O.S.

Proper shipping name (international)

CORROSIVE LIQUID, TOXIC, N.O.S.

14.3. Transport hazard class(es)

ADR class no. 8

ADR Hazard labels 8 +6.1

Classification code CT1

Hazard no. (ADR) 86

Road transport notes Limited quantity: LQ22

RAIL TRANSPORT (RID):

RID class no. 8

RID Hazard labels 8 +6.1

SEA TRANSPORT (IMDG):

IMDG class 8

EmS no. F-A, S-B

AIR TRANSPORT (IATA-DGR / ICAO-TI):

IATA/ICAO class 8

IATA/ICAO Hazard label 8 +6.1

14.4. Packing group

ADR packing group	II
RID packing group	II
IMDG packing group	II
IATA/ICAO packing group	II

14.5. Environmental hazards**14.6. Special precautions for user****14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No IBC-code for bulk transport offshore.

SECTION 15: Regulatory information

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

EU directives EC-regulation 453/2010/EC (CLP), 1907/2006/EC (REACH), 1272/2008/EC, 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

Chemical Safety Assessment Chemical Safety Report (CSR) has not been carried out for this product.

SECTION 16: Other information

Explanations to R-phrases in section 3 R-26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
R-35 Causes severe burns.
R-8 Contact with combustible material may cause fire.

Explanations to classification in section 3 H272 May intensify fire; oxidiser.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.

*** Information revised since the previous version of the SDS**

Revision comments Revision 2012.08.31 no. 1: superseedes safety data sheet of 2011.08.24. Prepared in CLP-format. No change in formulation or product classification.

Issued by Essenticon AS, Leif Weldingsvei 18, N-3208 Sandefjord, Norway. Phone: +47 33 42 34 50 Fax: +47 33 42 34 59 www.essenticon.com.

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Signature R. E. Lunde

Disclaimer The information in this data sheet is considered to be correct according to present knowledge and experience, but there is no guarantee that it is complete. It is therefore in the user's interest to ensure that the information is sufficient for the area it is intended for.