4-Nitroquinoline-N-Oxide

Material Safety Data Sheet according to 1907/2006/EC Article 31 (REACH)

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND THE COMPANY UNDERTAKING

Product name:	4-Nitroquinoline-N-oxide
Product code:	PPC-NQ02
Synonyms:	4-NQO
Recommended uses:	Not for use in humans, not for diagnostic purposes. Research use only.
Supplier:	Xenometrix AG, Gewerbestrasse 25, CH-4123 Allschwil, Switzerland
Emergency contact numbers:	+41 61 482 14 34
Country of origin:	Switzerland
HS Code:	3822.1900

2. HAZARDS IDENTIFICATION

Classification:	According to regulation (EC) No 1272/2008[EU-GHS/CLP] not a hazardous substance or mixture.	
Label element:	Keep out of the reach of children	
	Pictogram:	
	Signal word:	Warning
Hazard statement(s):	H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
	H341	Suspected of causing genetic defects.
	H350	May cause cancer.
Precautionary statement(s):	P202	Do not handle until all safety precautions have been read and understood.
	P261	Avoid breathing dust.
	P264	Wash hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P281	Use personal protective equipment as required.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	P301 + P312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
	P302+P352	IF ON SKIN: Wash with plenty of water.
	P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P405	Store locked up.
	P501	Dispose of contents/container in accordance with local/regional/national/international regulation.
Other hazards:	No data available	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product:	Molecular formula	$C_9H_6N_2O_3$
	Molecular weight	190.16 g/mol
Description:	Component is used as positive control in an assay.	
CAS-No:	56-57-5	
EINECS Number:	200-281-1	
Index-No:	No data available	
Other information:	Component is a powder	

4. FIRST AID MEASURES

Eye contact:	Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes. If contact lenses can´t remove, continue washing. Consult a physician or an expert.
Skin contact:	Remove contaminated clothing and wash before renew use. Wash off with soap and plenty of water. Consult a physician.
Inhalation:	Move person into fresh air and control respiration. If not breathing, give artificial respiration. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Consult a physician. Never cause nausea. Rinse mouth with water. Concerned person should drink water, better milk (two glasses at most). If nausea: Beware swallowing and keeping in recovery position.

5. FIRE–FIGHTING MEASURES

Extinguishing media:	In case of fire use water spray, dry chemical powder, carbon dioxide, or alcohol-resistant foam.
Special hazards arising from the substance or mixture:	Carbon oxides, nitrogen oxides (NOx). Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Advice for firefighters:	Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use proper personal protective equipment as indicated in Section 8. Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions:	Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.
Methods and materials for containment and cleaning up:	Sweep up and place the material in appropriate container for disposal and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

7. HANDLING AND STORAGE

Handling:	Wear appropriate protective clothing - see Section 8. Wash hands and face thoroughly after handling. Use only under a chemical fume hood. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Storage:	Store in the original container as much as possible. Recommended storage temperature: 2 - 8°C; Keep container tightly closed. Store away from incompatible materials such as oxidizing agents. Light sensitive. Air-sensitive. Store under inert gas. Protect from light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection:	Wear safety glasses with side protection. Wear appropriate protective safety glasses with side-shields conforming to EN166, chemical safety goggles or face-shield (min. 8-inch) as described by OSHA's eye and face protection regulations. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin protection:	Wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body protection:	Appropriate protective clothing, overalls.
Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N95 (US) or type P1 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to brown solid in a Vial
Odour:	No data available
pH:	No data available
Melting point:	154 - 156 °C
Boiling point:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Self-ignition temp.:	No data available
Danger of Explosion:	No data available
lower explosion limit:	No data available
upper explosion limit:	No data available
Decomposition Temp.:	No data available
Kinematic Viscosity:	No data available
Vapor Pressure:	No data available
Relative Density (20°C):	No data available
Relative Gas Density (20°C):	No data available
Solubility (20°C):	Soluble in DMSO
Partition coefficient n-octanol/water:	3.00
Log KOW:	No data available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal storage conditions and recommended use.
Conditions to avoid:	High humidity or direct sunlight.
Incompatibilities with other materials:	Strong oxidizing agents.
Hazardous decomposition products:	Nitrogen oxides (NOx), carbon dioxide (CO_2).

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50: mouse: 132 mg/kg. LC50: No data available.
RTECS#:	LL5075000.
Skin corrosion/irritation:	May causes skin irritation.
Serious eye damage/eye irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	May be harmful if inhaled. May cause headache and nausea.

Carcinogenicity rat :	Oral: Tumorigenic: Neoplastic by RTECS criteria. Liver: Tumors. Skin and appendages: Other: Tumors. Oral: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Kidney, Ureter, Bladder: Tumors. Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.
Carcinogenicity mouse :	Oral: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Kidney, Ureter, Bladder: Tumors. Skin: Tumorigenic: Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. Gastrointestinal: Tumors. Implant: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Kidney, Ureter, Bladder: Tumors. Tumorigenic: Tumors at site or application.
Reproductive toxicity:	Data not available.
Specific target organ toxicity:	No data available
Aspiration hazard:	Data not available.
Signs and symptoms of exposure:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Target organs:	Data not available.
Potential health effects:	Eye: May cause serious eye irritation. Skin: May be harmful by skin absorption. May cause skin irritation. Ingestion Harmful if swallowed. Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Chronic: No information found.
Other:	No data available.

12. ECOLOGICAL INFORMATION

Toxicity:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Result of PBT and vPvB assessment:	No data available
Other adverse effects:	No data available

13. DISPOSAL CONSIDERATION

Waste treatment methods:	Avoid discharge in environment.
Treatment key:	Ask your local administration.
Contaminated packaging/ product:	No data available.
Special precaution:	No data available.
Other:	Observe all federal, state and local environmental regulations. Mix or dissolve the material in a combustible solvent and burn in chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

ADR / RID	Not classified as hazardous for transport.
IMDG	Not classified as hazardous for transport.
IATA	Not classified as hazardous for transport.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available.
Chemical Safety Assessment: A chemical safety assessment was not carried out for this product

16. ADDITIONAL 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. Xenometrix AG shall not be held liable for any damage resulting from handling or from contact with the above product.