

# SAFETY DATA SHEET

## Ludigol

March 2, 2015

### 1: Identification of the substance and of the company

#### Product details

Trade Name: Sodium M-nitrobenzene Sulfonate, Ludigol

Chemical Name: J-Nitrobenzele Sulfonic Acid, Sodium Salt.

#### Application of the substance / the preparation

Mainly used as nickel remover in the plating, dye intermediate, used to make vanillin; or used as mild oxidant, or used as placarder auxiliary for vat dye and sulfur dye while printing. It also can be used as oxidant of synthetic dye. Moreover, it is used as anti-whitening agent, or color light protectant, or used as fixing agent of relief on printed cloth, and white background protectant.

Supplied by: PRO Chemical & Dye  
126 Shove Street  
Fall River, MA 02724

Emergency Telephone Numbers:  
800-255-3924 ChemTel. (United States)  
+ 1 01 813-248-0585 (Outside the United States)

### 2: Hazards Identification

- . Classification of tile substance or mixture
- . Classification according to Regulation (EC) No 1272/2008



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/4S/EC

Xi; Irritant

R36: Irritating to eyes .

Xi; Sensitizing

R43 : May cause sensitization by skin contact .

Information concerning particular hazards for human and environment: Not applicable.

Label elements

Labeling according 10 Regulation (EC) No 1272/2008

Hazard pictograms



GHS07

- Signal word    Warning
- Hazard-determining components of labeling: Void
- Hazard statements
  - H319 Causes serious eye irritation.
  - H317 May cause an allergic skin reaction.
- Precautionary statements
  - P261                Avoid breathing dust/fume/gas/mist/vapors/spray.
  - P180                Wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P35J+P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  
  - P311    Specific treatment (see on this label).
  - P363    Wash contaminated clothing before reuse.
  - P501    Dispose of contents/container in accordance with local/regional/national/international regulations.
- Labeling according to EU guidelines:
  - The product has been classified and marked in accordance with EU Directives I Ordinance on Hazardous Materials.
- Code letter and hazard designation of product:



Xi Irritant

- Risk phrases:
  - 36 Irritating to eyes.
  - 43 May cause sensitization by skin contact.
- Safety phrases:
  - 2 Keep out of the reach of children.
  - 24 Avoid contact with skin.
  - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - 37 Wear suitable gloves

### 3: Composition/information on ingredients

- Chemical characterization:
- CAS No. Description
  - 117-68-4 Sodium M-nitrobenzene Sulfonate
- Identification numbers)
  - EINECS Number: 204-857-3
  - Index number: 609-048-00-2
- Additional information:
  - Molecular Formula: C6-H5-N-05-S.NA
  - Molecular Weight: 125. 16

#### 4: First Aid Measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed  
Immediately remove any clothing soiled by the product.

- After inhalation:  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness, place patient stably in side position for transportation.
- After skin contact:  
Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before reuse.
- After eye contact:  
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.  
Get medical aid
- After swallowing:  
If swallowed do not induce vomiting never give anything by mouth to an unconscious person. Call a physician.
- Information for doctor: Treat symptomatically and supportively.
- The following symptoms may occur:  
Symptoms of vasodilation and reflex tachycardia may-present following organic nitrate overdose:  
Clinical signs of cyanosis appear before other symptoms because of the dark pigmentation of methemoglobin .

#### 5: Firefighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards caused by the substance, its products of combustion or resulting gases:  
Sulphur dioxide (SO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)
- Protective equipment:  
•Wear self-contained breathing apparatus and protective clothing to prevent contact with skin.

#### 6: Accidental release measures

- Person-related safety precautions:  
Eliminate sources of ignition. Keep area well ventilated and isolate the spill. Avoid inhalation and contact with skin and eyes.  
Wear protective equipment. Keep unprotected persons away.
- Measures/or environmental protection: Do not allow to enter sewers / surface or ground water.  
• Measures for cleaning/collecting: Keep in suitable; dosed containers/or disposal.

## 7: Handling and storage

- Handling:
- Information for safe handling:  
Avoid contact with eyes, skin and clothing.  
Handle in well ventilated area. Handle away from sources of ignition.
- Information about fire - and explosion protection:  
Protect against electrostatic charges.  
Keep ignition sources away - Do not smoke.
- Storage:
- Requirements to be met by storerooms and receptacles:  
Store in a cool, dry, well-ventilated area away from incompatible substances.  
Provide adequate ventilation / exhaust
- Information about storage in one common storage facility: Store away from oxidizing agents.

- Further information about storage conditions: Keep container tightly sealed.
- Specific applications  
Mainly used as nickel remover in the plating, dye intermediate, used to make vanillin; or used as mild oxidant, or used as placarder auxiliary for vat dye and sulfur dye while printing. It a/so can be used as oxidant of synthetic dye. Moreover, it is used as anti-whitening agent, or color light protectant, or used as fixing agent of relief on printed cloth, and while background protectant.

## 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at tile workplace: Not required.
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs; beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work:  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- Respiratory protection:  
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with Multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to. engineering controls. If the respirator is the sale 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).

## Protection of hands Protective gloves



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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material. but also on further marks of quality and varies from manufacturer- to manufacturer.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed

- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

## 9: Physical and Chemical Properties

- . General Information

- . Appearance:

Form: Powder or Granular  
Color: Light yellow  
Odor: Characteristic

- . Change in condition

Melting point/Melting Range	52.3°C
Boiling point/Boiling Range	217.5°C
Flash point:	>212°C
Ignition temperature	662°C
Danger of explosion	Product does not present an explosion hazard
Vapor pressure at 20°C	1.08x10 <sup>(-12)</sup> mm Hg
Density at 20°C	450 kg/m <sup>3</sup>
Solubility in / Miscibility with Water at 20°C	2.77x10 <sup>(+05)</sup> mg/l

- . Additional information: Atmospheric OH Rate Constant: 5.21x10<sup>(-14)</sup>cm<sup>3</sup>/molecule-sec at 25 log P (octanol-water): -2.61x10<sup>(+00)</sup>

## 10: Stability and reactivity

Thermal decomposition / conditions 10 be avoided: Keep away from heat, oil and moisture.

- Materials to be avoided: Avoid contact with strong oxidizing agents and alkalis.
- Dangerous reactions: Violent reaction with oil and oxidizing agents.
- Dangerous decomposition products:
  - Sulphur dioxide
  - Nitrogen oxides

## 11: Toxicological information

· Acute toxicity:

- LD/LC50 values relevant for classification:
  - Oral LD50 : 11000 mg/kg (rat)
  - Inhalative LC50 (4hrs) > 5.100 mg/m<sup>3</sup> (rat)

•Primary irritant effect:

- On the skin: May cause skin irritation.
- On the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.
- Acute effects (acute toxicity, irritation and corrosivity)

Irritation:

- Skin (rabbit): 500 mg/24h - Mild
- Eye (rabbit): 20 mg/24h - Moderate

· Sensitization May cause sensitization by skin contact.

## 12. Ecological information

Ecotoxicological effects:

Aquatic toxicity:

EC50 (48 hrs)	8665 mg/l (Daphnia magna)
LC50 (96hrs)	1350 mg/l (Fish)

Additional ecological information:

General notes:

Water hazard class / (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13: Disposal considerations

- Product:
- Recommendation
  - Must not be disposed together with household garbage. Do not allow product to reach sewage system:
- Uncleaned packaging:
  - Recommendation: Dispose off according to Federal, State and Local Regulations.

### 14: Transport information

- Maritime transport IMDG:
- Marine pollutant: No

### 15: Regulatory information

- Labeling according to Regulation (EC) No 1272/2008
- Hazard pictograms Please refer section 2
  - Signal word Warning
  - Hazard statements Please refer section 2
  - Precautionary statements Please refer section 2
- Labeling according to EU guidelines:
- Risk phrases: Please refer section 2
  - Safety phrases: Please refer section 2
  - : Chemical safety assessment A Chemical Safety Assessment has not been carried out.
- National regulations:
- Other regulations, Limitations and prohibitive regulations Not applicable
- Substances of very high concern (SVHC) according 10 REACH, Article 57
  - The substance is not listed as SVHC.

### 16: Other 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.

This company shall not be held liable for any damage resulting from handling or from contact with the above product.