

OCT 28 2013

# SIGMA-ALDRICH

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## Material Safety Data Sheet

Version 4.3  
Revision Date 02/22/2013  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : *trans*- $\beta$ -Nitrostyrene

Product Number : N26806  
Brand : Aldrich

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

**OSHA Hazards**  
Irritant

**GHS Classification**  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Specific target organ toxicity - single exposure (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram



Signal word : Warning

Hazard statement(s)  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

Precautionary statement(s)  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### HMIS Classification

Health hazard: 2  
Flammability: 0  
Physical hazards: 0

#### NFPA Rating

Health hazard: 2  
Fire: 0  
Reactivity Hazard: 0

### Potential Health Effects

**Inhalation** : May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** : May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes** : Causes eye irritation.  
**Ingestion** : May be harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : *trans*-1-Nitro-2-phenylethylene  
*trans*-beta-Nitrostyrene

Formula : C<sub>8</sub>H<sub>7</sub>NO<sub>2</sub>  
Molecular Weight : 149.15 g/mol

Component	Concentration
<b><i>trans</i>-<math>\beta</math>-Nitrostyrene</b>	
CAS-No. 5153-67-3	-

### 4. FIRST AID MEASURES

**General advice**  
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**  
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**  
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**  
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIREFIGHTING MEASURES

**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**  
Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**  
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**  
Do not let product enter drains.

**Methods and materials for containment and cleaning up**  
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

00000539

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form crystalline  
Colour yellow

**Safety data**

pH no data available  
Melting point/freezing point Melting point/range: 55 - 58 °C (131 - 136 °F) - lit.  
Boiling point 250 - 260 °C (482 - 500 °F) - lit.  
Flash point no data available  
Ignition temperature no data available  
Auto-ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Vapour pressure no data available  
Density no data available  
Water solubility no data available  
Partition coefficient: n-octanol/water no data available  
Relative vapour density no data available

Odour no data available  
Odour Threshold no data available  
Evaporation rate no data available

**10. STABILITY AND REACTIVITY****Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Materials to avoid**

Strong oxidizing agents, Strong bases

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)  
Other decomposition products - no data available

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Oral LD50  
no data available

Inhalation LC50  
Dermal LD50  
no data available

Other information on acute toxicity  
no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**

no data available

**Additional Information**

RTECS: WL5460000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

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**15. REGULATORY INFORMATION**

**OSHA Hazards**

Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
trans- $\beta$ -Nitrostyrene	5153-67-3	

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
trans- $\beta$ -Nitrostyrene	5153-67-3	

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. OTHER INFORMATION**

**Further Information**

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