

MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	1
Fire Hazard	1
Reactivity	0



See Section 8.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code:	S2402
Product Name:	TRANS-STILBENE, SCINTILLATION GRADE
Chemical Name:	No information available
Synonyms:	trans-Diphenylethene trans-1,2-Diphenylethene (E)-1,2-Diphenylethylene trans-alpha,beta-Diphenylethylene trans-1,2-Diphenylethylene (E)-1,1'-(1,2-Ethenediyl)bisbenzene Benzene, 1,1'-(1,2-ethenediyl)bis-, (E)- (9CI) (E)-Stilbene trans-1,1'-(1,2-Ethenediyl)bis(benzene)
Recommended use:	Dyes. In manufacturer of optical bleaches.
CAS #:	103-30-0
Formula:	C14-H12
RTECS #	WJ4926500
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	https://www.spectrumchemical.com
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Regina Wachenheim (East Coast)
Contact Person:	Martin LaBenz (West Coast)

2. HAZARDS IDENTIFICATION

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION !. May be harmful if swallowed. May cause skin and eye irritation. May cause irritation of respiratory tract.

Odor:
No information available.

Physical state:
Solid.

Appearance:
Crystalline. Crystals.

Color:
White.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact:

Contact with eyes may cause irritation.

Inhalation:

May cause irritation of respiratory tract.

Ingestion:

May be harmful if swallowed. May cause digestive tract irritation. It may affect the kidneys. May affect the adrenal gland.

Chronic Potential Health Effects:

Component

trans-Stilbene
103-30-0 (100)

Carcinogen Status:

No information available

Target Organs: No information available

Mutagenic Effects: No information available

Teratogenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
trans-Stilbene	103-30-0	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	No information available.
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Flash Point Tested according to:	Not available
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Lower Explosion Limit (%):	No information available
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Upper Explosion Limit (%):	No information available
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Autoignition Temperature (°C/°F):	No information available
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Suitable Extinguishing Media:	Carbon dioxide (CO ₂). Dry chemical. Water spray mist or foam.
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Unsuitable Extinguishing Media:	No information available.
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Hazardous Combustion Products:	Carbon monoxide; Carbon dioxide
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Specific hazards:	May be combustible at high temperatures.
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Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
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Specific Methods:	No information available.
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let this chemical enter the environment. Prevent entry into waterways, sewers.

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Storage**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Effective dust mask. Wear respirator with dust filter..

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits**United States**

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
trans-Stilbene - 103-30-0	None	None	None	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
trans-Stilbene 103-30-0	None	None	None	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
trans-Stilbene 103-30-0	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid.

Appearance:

Crystalline. Crystals.

Color:

White.

Odor:

No information available.

Taste

No information available

Molecular/Formula weight:

180.25

Flash point (°C):

Not applicable

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

No information available

Autoignition Temperature (°C/°F):

No information available

Melting point/range(°C/°F):

122-125 °C/252-257 °F

Boiling point/range(°C/°F):

305-307 °C/581-585 °F

pH:

No information available

Decomposition temperature(°C/°F):

No information available

Specific gravity:

0.9707

Density (g/cm³):

1.14

Bulk density:

No information available

Vapor pressure @ 20°C (kPa):

No information available

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

**Partition coefficient
(n-octanol/water):**

4,81

Miscibility:

No information available

Solubility:

Insoluble in water

Freely soluble in Benzene

Freely soluble in Ether

10. STABILITY AND REACTIVITY

Stability:

Stable at normal conditions

Conditions to avoid:

Heat. Avoid dust formation.

Incompatible Materials:

Strong oxidizing agents.

Hazardous decomposition products:

Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.

Possibility of Hazardous Reactions:

No information available

Polymerization:

Hazardous polymerisation does not occur

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

trans-Stilbene - 103-30-0

- LD50/oral/rat = No information available
- LD50/oral/mouse = 920 mg/kg Oral LD50 Mouse
- LD50/dermal/rat = No information available
- LD50/dermal/rabbit = No information available
- LC50/inhalation/rat = No information available
- LC50/inhalation/mouse = No information available
- Other LD50 or LC50 information = No information available

Product Information

- LC50/inhalation/rat No information available
- LC50/inhalation/mouse No information available
- LD50/dermal/rabbit No information available
- LD50/dermal/rat No information available
- LD50/oral/mouse = 920mg/kg
- LD50/oral/rat No information available

Local Effects

- Skin irritation:** May cause skin irritation.
- Eye irritation:** Contact with eyes may cause irritation.
- Inhalation:** May cause irritation of respiratory tract.
- Ingestion:** May be harmful if swallowed. May cause digestive (gastrointestinal) tract irritation.
- Sensitization:** No information available

Chronic Toxicity

Chronic Toxicity Prolonged or repeated ingestion may affect the kidneys. Prolonged or repeated ingestion may affect the adrenal gland. Prolonged or repeated ingestion may affect metabolism (changes in Ca).

Carcinogenic effects: Not considered carcinogenic.

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
trans-Stilbene	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: No information available

Reproductive Effects: May cause adverse reproductive effects based on animal test data
Experiments have shown reproductive toxicity effects on laboratory animals

Teratogenic Effects: No information available

Target Organs: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects: No data available.

Aquatic toxicity: No information available

Mobility: Expected to be immobile in soil based on estimated Koc.

Persistence and degradability: No information available

Bioaccumulative potential: an estimated BCF of 1,000 from its log Kow and a regression-derived equation, suggests the potential for bioconcentration in aquatic organisms is very high.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
trans-Stilbene	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

ADR

UN-No: 3077
(exception <5 liters for liquids and < 5 kilogram for solids - per single packaging or combination packaging per inner packaging)
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (trans-stilbene)

Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: 3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s (trans-stilbene)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: 3077
 (exception <5 liters for liquids and < 5 kilogram for solids - per single packagings or combination packagings per inner packaging)
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (trans-stilbene)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: 3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (trans-stilbene)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

IATA

UN-No: 3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (trans-stilbene)
Hazard Class: 9
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>trans-Stilbene</i>	Present	Present	Not present	Not present	Not present	Present	Present 203-098-5

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
trans-Stilbene	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
trans-Stilbene	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
trans-Stilbene	Not Applicable	Not Applicable

Canada**WHMIS hazard class:**

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
trans-Stilbene	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
trans-Stilbene	Not listed	Not listed

EU Classification**R-phrase(s)**

R22 - Harmful if swallowed.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

N - Dangerous for the environment.

Xn



N

**16. OTHER INFORMATION**

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 21-Jun-2013

Reason for revision: Not applicable

Prepared by: Sonia Owen

Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.