SAFETY DATA SHEETS

According to American OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Version: 1.0
Creation Date: Mar. 17, 2021
Revision Date: Mar. 17, 2021

1. Identification

1.1 Product identifier

Product name oilbase ballpen ink （blue）

1.2 Other means of identification

Product number -
Other names Phenoxytol; Ethylene glycol monophenyl ether; PHENOXETOL

1.3 Recommended use of the chemical and restrictions on use

Identified uses writting
Uses advised against no data available

1.4 Details of the supplier of the safety data sheet

Company Suzhou xiongying Ink New Materials Co.,Ltd
Address NO.539，Yunli Road，Economic and Technological development Zone
Telephone +86-512-63331385

1.5 Emergency phone number

Emergency phone number +86-512-63331385
Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

2. Hazard(s) identification

2.1 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity - Oral, Category 4
Skin corrosion, Category 1
Eye damage, Category 1
Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 3

2.2 GHS label elements, including precautionary statements

Pictogram(s)

Signal word Danger
Hazard statement(s) H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)
Prevention P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response	P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/…if you feel unwell. P330 Rinse mouth. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/doctor/… P321 Specific treatment (see ... on this label). P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	P405 Store locked up.
Disposal	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

no data available

3. Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
2-phenoxyethanol	2-Phenoxy Ethanol	122-99-6	204-589-7	25.00%
Benzyl alcohol	Benzy1 alcohol	100-51-6	202-859-9	15.00%
Disulfo copper phthalocyanine amine salt	Sovent blue38	1328-51-4	215-523-1	15.00%
[Name confidential or not available]	Keton resin	25054-06-2	607-515-5	15.00%
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	BX	147-14-8	205-685-1	15.00%
Propane-1,2-diol	Propane-1,2-diol	57-55-6	200-338-0	10.00%
2,2',2"-nitrilotriethanol	Triethanolamine	102-71-6	203-049-8	5.00%

4. First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Fresh air, rest.

Following skin contact

Rinse and then wash skin with water and soap.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention .

4.2 Most important symptoms/effects, acute and delayed

May cause moderate eye irritation and moderate corneal injury. Excessive exposure may cause skin irritation and hemolysis. (USCG, 1999)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Poisons A and B

5. Fire-fighting measures

5.1 Suitable extinguishing media

To fight fire, use CO2, dry chemical.

5.2 Specific hazards arising from the chemical

Combustible.

5.3 Special protective equipment and precautions for fire-fighters

Use water spray, powder, alcohol-resistant foam, carbon dioxide.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.2 Environmental precautions

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. Handling and storage

7.1 Precautions for safe handling

NO open flames.

7.2 Conditions for safe storage, including any incompatibilities

Separated from strong oxidants.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

MAK: 5.7 mg/m3, 1 ppm; peak limitation category: I(1); pregnancy risk group: C

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety goggles.

Skin protection

Protective gloves. Protective clothing.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Use ventilation, local exhaust or breathing protection.

9. Physical and chemical properties

Appearance	Liquid.
Odor	pure CAS 122-99-6: Faint aromatic odor;pure CAS 100-51-6: Faint aromatic odor;pure CAS 57-55-6: Practically odorless;pure CAS 102-71-6: Slight ammonical odor
Odor threshold	pure CAS 100-51-6: 5.5 ppm
pH	pure CAS 100-51-6: A solution in water is neutral to litmus;pure CAS 102-71-6: pH = 10.5 (0.1 N aqueous solution); strong base
Melting point/freezing point	pure CAS 122-99-6: 14°C;pure CAS 100-51-6: -15°C;pure CAS 147-14-8: 480 °C. Atm. press.:1 013 hPa.;pure CAS 57-55-6: -59°C;pure CAS 102-71-6: 21.6°C
Initial boiling point and boiling range	pure CAS 122-99-6: 245°C;pure CAS 100-51-6: 205°C;pure CAS 25054-06-2: 155.7ºC at 760mmHg;pure CAS 147-14-8: 93°C/10mmHg(lit.);pure CAS 57-55-6: 188.2°C;pure CAS 102-71-6: 335.4°C
Flash point	pure CAS 122-99-6: 127°C c.c.;pure CAS 100-51-6: 93°C c.c.;pure CAS 25054-06-2: 46.7ºC;pure CAS 147-14-8: 89°C(lit.);pure CAS 57-55-6: 101°C c.c.;pure CAS 102-71-6: 179°C
Evaporation rate	no data available
Flammability	pure CAS 122-99-6: Combustible.;pure CAS 100-51-6: Combustible.;pure CAS 57-55-6: Combustible.;pure CAS 102-71-6: Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Upper/lower flammability or explosive limits	pure CAS 57-55-6: Lower flammable limit: 2.6% by volume; Upper flammable limit: 12.5% by volume
Vapor pressure	pure CAS 122-99-6: 0.0013 kPa(20°C);pure CAS 100-51-6: 13.2 Pa(20°C);pure CAS 147-14-8: < 0 hPa. Temperature:20 °C. Remarks:Extrapolated.;Ca. 0.018 hPa. Temperature:475 °C.;pure CAS 57-55-6: 10.6 Pa(20°C);pure CAS 102-71-6: <1 Pa(25°C)

Vapor density	pure CAS 122-99-6: 4.8 (vs air);pure CAS 100-51-6: 3.7 (vs air);pure CAS 57-55-6: 2.62 (vs air);pure CAS 102-71-6: 5.14 (vs air)
Relative density	pure CAS 122-99-6: 1.1;pure CAS 100-51-6: 1.04;pure CAS 147-14-8: 1.62 g/cm³;pure CAS 57-55-6: 1.04;pure CAS 102-71-6: 1.1
Solubility(ies)	pure CAS 122-99-6: Solubility in water, g/100ml: 2.7 ;pure CAS 100-51-6: Solubility in water, g/100ml: 4 ;pure CAS 147-14-8: In water: 4 - 9 µg/L. Temperature:23 °C..N-octanol.;pure CAS 57-55-6: Solubility in water: miscible;pure CAS 102-71-6: Solubility in water: miscible
Partition coefficient n-octanol/water	pure CAS 122-99-6: 1.2;pure CAS 100-51-6: 1.1;pure CAS 147-14-8: 6.6 (calculated);pure CAS 57-55-6: -0.92;pure CAS 102-71-6: -2.3 (not explosive)
Auto-ignition temperature	pure CAS 122-99-6: 500°C;pure CAS 100-51-6: 436°C;pure CAS 147-14-8: 356 °C. Remarks:At atm. press. of 1013.0 hPa.;pure CAS 57-55-6: 420°C;pure CAS 102-71-6: 324°C
Decomposition temperature	no data available
Viscosity	pure CAS 122-99-6: dynamic viscosity (in mPa s) = 41. Temperature:19.8°C. Remarks:Temperature in the range 19.5-20.2 °C. Viscosity independent of the shear rate.;dynamic viscosity (in mPa s) = 19. Temperature:40.5°C. Remarks:Temperature in the range 40-41 °C. Viscosity independent of the shear rate.;pure CAS 100-51-6: dynamic viscosity (in mPa s) = 5.05. Temperature:25.0°C.;pure CAS 57-55-6: dynamic viscosity (in mPa s) = 43.428. Temperature:25°C.;dynamic viscosity (in mPa s) = 24.247. Temperature:35°C.;dynamic viscosity (in mPa s) = 12.78. Temperature:45°C.;pure CAS 102-71-6: kinematic viscosity (in mm²/s) = 830.2. Temperature:20°C.;kinematic viscosity (in mm²/s) = 181.5. Temperature:40°C.;kinematic viscosity (in mm²/s) = 59.1. Temperature:60.0°C.

10. Stability and reactivity

10.1 Reactivity

Reacts with strong oxidants.

10.2 Chemical stability

Stable in presence of acids & alkalies.

10.3 Possibility of hazardous reactions

Reacts with strong oxidants.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Can react vigorously with oxidizing materials.

10.6 Hazardous decomposition products

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

11. Toxicological information

Acute toxicity

- Oral: pure CAS 122-99-6: LD50 - rat (female) - 1 840 mg/kg bw.;pure CAS 100-51-6: LD50 - rat (male) - 1.55 mL/kg bw. Remarks:Corresponding to 1620 mg/kg bw (density: 1.045 g/mL).;pure CAS 147-14-8: LD50 - rat (male/female) - > 6 400 mg/kg bw.;pure CAS 57-55-6: LD50 - rat (male/female) - 22 000 mg/kg bw. Remarks:This value corresponds to 21.0 ml/kg bw, with standard errors of 19.2-23.9 ml/kg bw.;pure CAS 102-71-6: LD50 - rat (male/female) - 6 400 mg/kg bw.
- Inhalation: pure CAS 122-99-6: LC50 - rat (male/female) - > 1 000 mg/m³ air (nominal).;pure CAS 100-51-6: LC50 - rat (male/female) - > 4 178 mg/m³ air.;pure CAS 57-55-6: LC50 - rabbit - > 317 042 mg/m³ air.;pure CAS 102-71-6: LC0 - rat (male/female) - saturated TEA atmosphere (approximately 1.8 mg/m³).
- Dermal: pure CAS 122-99-6: LD50 - rat (male/female) - 14 391 mg/kg bw.;pure CAS 100-51-6: LD50 - guinea pig - < 5 000 mg/kg bw.;pure CAS 147-14-8: LD50 - rat (male) - > 5 000 mg/kg bw.;pure CAS 57-55-6: LD50 - rabbit - > 2 000 mg/kg bw.;pure CAS 102-71-6: LD50 - rabbit - > 2 000 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

pure CAS 122-99-6: The substance is irritating to the eyes, skin and respiratory tract. The substance may cause effects on the central nervous system and peripheral nervous system. This may result in impaired functions.;pure CAS 100-51-6: The aerosol is irritating to the eyes and skin. The substance may cause effects on the nervous system.;pure CAS 57-55-6: The substance is mildly irritating to the eyes and respiratory tract. Ingestion of large amounts could cause metabolic acidosis.;pure CAS 102-71-6: The substance is irritating to the eyes, skin and respiratory tract.

STOT-repeated exposure

pure CAS 122-99-6: The substance defats the skin, which may cause dryness or cracking. The substance may have effects on the central nervous system. This may result in impaired functions.;pure CAS 100-51-6: Repeated or prolonged contact may cause skin sensitization.;pure CAS 102-71-6: Repeated or prolonged contact may cause skin sensitization.

Aspiration hazard

pure CAS 122-99-6: A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20°C.;pure CAS 100-51-6: No indication can be given about the rate at which a harmful concentration of this substance in the air is reached on evaporation at 20°C.;pure CAS 147-14-8: No indication can be given about the rate at which a harmful concentration of this substance in the air is reached.;pure CAS 57-55-6: No indication can be given whether a harmful concentration in the air will be reached.;pure CAS 102-71-6: Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

12. Ecological information

12.1 Toxicity

- Toxicity to fish: pure CAS 122-99-6: LC50 - Pimephales promelas - 344 mg/L - 96 h.;pure CAS 100-51-6: LC50 - Pimephales promelas - 460 mg/L - 96 h.;pure CAS 147-14-8: LC50 - Danio rerio (previous name: Brachydanio rerio) - > 100 mg/L - 96 h.;pure CAS 57-55-6: LC50 - Oncorhynchus mykiss (previous name: Salmo gairdneri) - 40 613 mg/L - 96 h.;pure CAS 102-71-6: LC50 - Pimephales promelas - 11 800 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: pure CAS 122-99-6: EC50 - Daphnia magna - > 500 mg/L - 48 h.;pure CAS 100-51-6: EC50 - Daphnia magna - 230 mg/L - 48 h.;pure CAS 147-14-8: EC50 - Daphnia magna - > 500 mg/L - 48 h.;pure CAS 57-55-6: LC50 - Ceriodaphnia dubia - 18 340 mg/L - 48 h.;pure CAS 102-71-6: EC50 - Ceriodaphnia dubia - 609.88 mg/L - 48 h.
- Toxicity to algae: pure CAS 122-99-6: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - > 500 mg/L - 72 h.;pure CAS 100-51-6: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - 770 mg/L - 72 h.;pure CAS 147-14-8: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - > 100 mg/L - 72 h.;pure CAS 57-55-6: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - 24 200 mg/L - 72 h.;pure CAS 102-71-6: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - 512 mg/L - 72 h.
- Toxicity to microorganisms: pure CAS 122-99-6: EC20 - activated sludge of a predominantly domestic sewage - 620 mg/L - 30 min. Remarks:Respiration rate.;pure CAS 100-51-6: IC50 - Aerobic heterotrophs and Nitrosomonas - 2 100 mg/L - 49 h. Remarks:Respiration rate.;pure CAS 147-14-8: EC50 - activated sludge - > 10 000 mg/L - 3 h. Remarks:Respiration rate.;pure CAS 57-55-6: NOEC - Pseudomonas putida - > 20 000 mg/L - 18 h.;pure CAS 102-71-6: IC50 - activated sludge of a predominantly domestic sewage - > 1 000 mg/L - 3 h. Remarks:Respiration rate.

12.2 Persistence and degradability

AEROBIC: For 2-phenoxyethanol, theoretical BODs of 2% (5-day), 71% (10-day), and 80% (20-day) have been measured(1); a theoretical 20-day BOD of 50% indicates a compound will largely be removed during biological waste treatment(1).

12.3 Bioaccumulative potential

An estimated BCF of 1.5 was calculated in fish for 2-phenoxyethanol(SRC), using a log Kow of 1.16(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4 Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc of 2-phenoxyethanol can be estimated to be 15(SRC). According to a classification scheme(2), this estimated Koc value suggests that 2-phenoxyethanol is expected to have very high mobility in soil.

12.5 Other adverse effects

no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.5 Environmental hazards

ADR/RID: No IMDG: No IATA: No

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
2-phenoxyethanol	2-Phenoxy Ethanol	122-99-6	204-589-7
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Not Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Not Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Not Listed.
Federal Drinking Water Guidelines	no data available		
State Drinking Water Guidelines	no data available		
Clean Water Act Requirements	no data available		
CERCLA Reportable Quantities	no data available		
RCRA Requirements	no data available		
FIFRA Requirements	no data available		
FDA Requirements	Ethylene glycol monophenyl ether is an indirect food additive for use only as a component of adhesives.		

Chemical name	Common names and synonyms	CAS number	EC number
Benzyl alcohol	Benzy1 alcohol	100-51-6	202-859-9
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Not Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Listed.

Chemical name	Common names and synonyms	CAS number	EC number
Disulfo copper phthalocyanine amine salt	Sovent blue38	1328-51-4	215-523-1
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Not Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Not Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Not Listed.

Chemical name	Common names and synonyms	CAS number	EC number
[Name confidential or not available]	Keton resin	25054-06-2	607-515-5
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Not Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Not Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Not Listed.

Chemical name	Common names and synonyms	CAS number	EC number
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	BX	147-14-8	205-685-1
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Not Listed.

Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Not Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Not Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
Propane-1,2-diol	Propane-1,2-diol	57-55-6	200-338-0
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Not Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Listed.
Chemical name	**Common names and synonyms**	**CAS number**	**EC number**
2,2',2"-nitrilotriethanol	Triethanolamine	102-71-6	203-049-8
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
California Prop. 65 Components			Not Listed.
New Jersey Right To Know - Right to Know Hazardous Substance List (RTKHSL)			Listed.
Massachusetts Right To Know - MASSACHUSETTS SUBSTANCE LIST (MSL)			Listed.
Pennsylvania Right To Know - HAZARDOUS SUBSTANCE LIST			Listed.

16. Other information

Information on revision

Creation Date Mar. 17, 2021
Revision Date Mar. 17, 2021

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Other Information

The relation between odour and the occupational exposure limit cannot be indicated.

Any questions regarding this SDS, Please send your inquiry to sds@xixisys.com

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