



Safety Data Sheet

Creation Date: 2020/02/11	SDS NO.: 1083E
Product Name: 2-methylaniline o-toluidine 2-aminotoluene o-aminotoluene	Version: V2.0.0.1

SECTION 1 Identification of the chemical and supplier

Chemical Name:

2-methylaniline|o-toluidine|2-aminotoluene|o-aminotoluene

Synonyms:

CAS No.: 95-53-4

EC No.: 202-429-0

Molecular Formula: C7H9N

Recommended Uses: Please consult manufacturer.

Restrictions on Use: Please consult manufacturer.

Name of the company: Yixing Wencheng Chemical Co., Ltd

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SECTION 2 Hazards identification

| Emergency overview

Liquid. Toxic if swallowed. Serious irritating to eyes. Toxic by inhalation. Very toxic to aquatic organisms, Use appropriate container to avoid environmental contamination. May cause long-term adverse effects in the aquatic environment. Use appropriate container to avoid environmental contamination.

| Hazard classification according to GHS

According to series standards of GB 30000-2013: Rules for classification and labelling of chemicals. (Please refer to 16th chapter of SDS), hazard classification as following: Acute Toxicity – Oral, Category 3; Serious Eye Damage/Irritation, Category 2A; Acute Toxicity – Inhalation, Category 3; Carcinogenicity, Category 1A; Hazardous To The Aquatic Environment – Short-Term (Acute) Hazard, Category 1; Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard, Category 2.

| Label elements

Hazard pictograms



Signal word: **Danger**

Hazard statements: Toxic if swallowed, Causes serious eye irritation, Toxic if inhaled, May cause cancer, Very toxic to aquatic life, Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash face and hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: Call a POISON CENTER/doctor. Specific treatment (see ... on this label). Rinse mouth. Collect spillage. **IF SWALLOWED:** Immediately call a POISON CENTER/doctor. **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. **IF exposed or concerned:** Get medical advice/attention. **If eye irritation persists:** Get medical advice/attention. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed. **Disposal:** Dispose of contents/container in accordance with local/regional/national/ international regulations.

Hazard description

Physical and chemical hazards

No information available

Health hazards

Blue lips or finger nails. Blue skin. Confusion. Dizziness. Headache. Shortness of breath. Weakness. Convulsions. Nausea. Unconsciousness. Blue lips or fingernails. Blue skin. Dizziness. Headache. Laboured breathing (Further see Inhalation). **MAY BE ABSORBED!** Redness. Blue lips or fingernails. Blue skin. (Further see Inhalation). Redness. Pain.

Environmental hazards

This product is toxic to aquatic life with long lasting effects. Please refer to 12th chapter of SDS.

SECTION 3 Composition/information on ingredients

√ Substance Mixture

Component	Concentration/Range	CAS No.
o-Toluidine	>= 99	95-53-4

SECTION 4 First aid measures

Description of first aid measures

General advice: Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.

Skin contact: Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer immediately for medical attention.

Eye contact: Rinse with plenty of water (remove contact lenses if easily possible). Refer immediately for medical attention.

Inhalation: Fresh air, rest. Artificial respiration may be needed. Refer immediately for medical attention.

Ingestion: Rinse mouth. Refer immediately for medical attention.

Advice for protecting the rescuer: Remove all sources of ignition and increase ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use personal protective equipment including respirator.

Special note to the doctor: Treat symptomatically. Symptoms may be delayed.

SECTION 5 Firefighting measures

| Hazard characteristics

May emit poisonous fumes on fire. Containers may explode when heated. May expand or decompose explosively when heated or involved in fire.

| Extinguishing method and media

Suitable extinguishing media: Dry chemical, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter or spread fire.

| Fire precautions and measures

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. Fight fire from a safe distance, with adequate cover. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6 Accidental release measures

| Personal precautions, protective equipment and emergency procedures

Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

| Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

| Methods and materials for containment and cleaning up

Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

SECTION 7 Handling and storage

| Precautions for handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Keep away from heat/sparks/open flames/ hot surfaces.

Precautions for storage

Keep containers tightly closed. Keep containers in a dry, cool and well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. Store away from incompatible materials and foodstuff containers. Storage temperature generally should not be higher than 32 °C, relative humidity generally should not be higher than 80%.

SECTION 8 Exposure controls/personal protection**Control parameters****Occupational Exposure limit values**

COMPONENT	STANDARD	TYPE	STANDARD VALUE	REMARK
o-Toluidine	GBZ 2.1-2019	PC-TWA	2 mg/m ³	Skin; G1 (o -)
		PC-STEL	-	

Biological limit values

No information available.

Monitoring methods

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. GBZ/T 160.1~GBZ/T 160.81 -2004 Determination of toxic substances in workplace air (Series standard) .

Engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Set up emergency exit and necessary risk-elimination area.

Respiratory protection

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

Eye protection

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).

Skin and body protection

Wear fire/flame resistant/retardant clothing and antistatic boots.

Hand protection

Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

Other protection

Smoking, eating and drinking water is forbidden in the workplace. After work, shower and change clothes. To maintain good health habits.

SECTION 9 Physical and chemical properties

Appearance: Light yellow to light amber liquid	
pH (Specified the concentration) : 7.4 (20°C, 1,4 Masse-%)	Odor: No information available
Initial boiling point and boiling range(°C): 200	Melting point/freezing point(°C): -16
Vapor density(Air = 1): 3.7	Density: No information available
Saturated vapor pressure (kPa): 34.5Pa (25°C)	Relative density(Water=1): 1.00
Evaporation rate: No information available	Viscosity(mm²/s): No information available
Flash point(°C): 85	N-octanol/water partition coefficient: 1.43
Decomposition temperature(°C): No information available	Auto-ignition temperature(°C): 480
Upper/lower explosive limits[%(v/v)]: Upper limit: 7.5; Lower limit: 1.5	
Solubility: Partly miscible with water	Flammability: Combustible

SECTION 10 Stability and reactivity

| Stability

Stable under proper operation and storage conditions.

| Incompatible materials

Oxidants, halogen, anhydrides, acids, metals, metal oxides, potassium permanganate, nitro-compounds and metal salts.

| ㉔ Conditions to avoid

Incompatible materials, heat, flame and spark.

| Hazardous reactions

In contact with oxidants, anhydrides, metals, metal oxides / KMnO₄ metal salts, nitro-compounds may cause a fire or explosion.

| Decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

| Acute toxicity

COMPONENT	CAS NO.	LD ₅₀ (ORAL)	LD ₅₀ (DERMAL)	LC ₅₀ (INHALATION)-4H
o-Toluidine	95-53-4	670mg/kg(Rat)	No information available	3.778mg/L(Rat)

Carcinogenicity

ID	CAS NO.	COMPONENT	IARC	NTP
1	95-53-4	o-Toluidine	Category 1	Not Listed

Skin irritation/corrosion

No information available

Eye irritation/corrosion

Causes serious eye irritation(Category 2A)

Skin sensitization

No information available

Respiratory sensitization

No information available

Germ cell mutagenicity

No information available

Reproductive toxicity

No information available

STOT-single exposure

No information available

STOT-repeated exposure

No information available

Aspiration hazard

No information available

SECTION 12 Ecological information**Acute aquatic toxicity**

COMPONENT	CAS NO.	FISH	CRUSTACEANS	ALGAE
o-Toluidine	95-53-4	LC ₅₀ : 150mg/L (96h)(Fish)	EC ₅₀ : 16mg/L (48h)(Crustaceans)	ErC ₅₀ : 29.4mg/L (96h)(Algae)

Chronic aquatic toxicity

COMPONENT	CAS NO.	FISH	CRUSTACEANS	ALGAE
o-Toluidine	95-53-4	NOEC: 13mg/L(Fish)	NOEC: 0.013mg/L(Crustaceans)	NOEC : 6.4mg/L(Algae)

Persistence and degradability

No information available

| Bioaccumulative potential

No information available

| Mobility in soil

No information available

| Other deleterious effect

No information available.

SECTION 13 Disposal considerations

| Disposal methods

Product: Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated packaging: Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

| Disposal considerations

Refer to section 13.1 and 13.2.

SECTION 14 Transport information

| UN number: 1708

| UN proper shipping name: TOLUIDINES, LIQUID

| Transport hazard class: 6.1

| Packing group: II

| Label



| Marine pollutant (Yes/No): 是



| Methods of packing

Metal drum, removable head. Threaded glass, metal cover pressure bottles, plastic bottles or metal (cans) outside the ordinary wooden box etc. thread mouth glass bottles, plastic bottles or tinplate barrels (LP), full floor grille boxes, fibreboard or plywood box etc. Packaging as recommended by manufacturer.

| Precautions for transport

Transit should be anti-exposure, rain, high temperature. Strictly prohibited shipping or transportation with acids, alkalis, oxidants, food and food additives etc. Transport vehicles should be equipped with the

appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

SECTION 15 Regulatory information

| Regulatory information

COMPONENT	A	B	C	D	E	F	G	H
o-Toluidine	Listed	Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

【A】 Catalog of Hazardous Chemicals(2015 Edition), Notice 5th 2015, China State Administration of Work Safety.

【B】 Catalog of Priority Hazardous Chemicals for Environment Management, Notice 33th 2014, Ministry of Environmental Protection of PRC.

【C】 List of Toxic Chemicals Restricted to be Imported/Exported in China, Notice 85th 2013, Ministry of Environmental Protection of PRC.

【D】 Catalog of Stupefacent and Psychotropic Substances(2013Edition), Notice 230th 2013, China Food and Drug Administration.

【E】 Catalog of Hazardous Chemicals for Priority Management (First and Second batches) , Notice 95th, 2011, Notice 12th 2013, China State Administration of Work Safety.

【F】 List of Ozone Depletion Chemicals Controlled to be Imported/Exported in China (First to Sixth batches) , Notice from 2000 to 2012 Ministry of Environmental Protection of PRC.

【G】 Dangerous Chemicals Directory Used to Manufacture Exploder(2011 Edition), Notice 25th Nov. 2011, Ministry of Public Security of PRC1.

【H】 Catalog of Highly Toxic Chemicals, Notice 142th 2003, China Ministry of Health.

SECTION 16 Others

Latest Revision Date: 2020/02/11

| Revision explanation

This Safety Data Sheet (SDS) was prepared according to standards of 《 Safety data sheet for chemical products—Content and order of sections》 (GB/T 16483-2008) and 《Guidance on the compilation of safety data sheet for chemical products》 (GB/T 17519-2013) . The result of GHS classification according to 《Guidance on the Catalog of Hazardous Chemicals(2015 Edition) (trial) 》 and series standards of 《 Rules for classification and labelling of chemicals 》 (GB 30000.2-2013~GB 30000.29-2013).

| Reference

【1】 IPCS: The International Chemical Safety Cards (ICSC) ,website: <http://www.ilo.org/dyn/icsc/showcard.home>.

【2】 IARC, website: <http://www.iarc.fr/>.

【3】 OECD: The Global Portal to Information on Chemical Substances, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.

【4】 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.

【5】 NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

【6】 EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.

【7】 U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.

【8】 Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms

CAS –Chemical Abstracts Service	CMR - Carcinogens, mutagens or substances toxic to reproduction
PC-STEL - Short term exposure limit	PC-TWA - Time Weighted Average
DNEL - Derived No Effect Level	IARC - International Agency for Research on Cancer
RPE - Respiratory Protective Equipment	PNEC –Predicted No Effect Concentration
LC₅₀ - Lethal Concentration 50%	LD₅₀ - Lethal Dose 50%
NOEC -No Observed Effect Concentration	EC₅₀ - Effective Concentration 50%
PBT - Persistent, Bioaccumulative, Toxic	POW - Partition coefficient Octanol:Water
BCF - Bioconcentration factor (BCF)	vPvB - very Persistent, very Bioaccumulative
IMDG -International Maritime Dangerous Goods	ICAO/IATA -International Civil Aviation Organization/International Air Transportation Association
UN -The United Nations	ACGIH -American Conference of Governmental Industrial Hygienists
NFPA -National Fire Protection Association	OECD -Organization for Economic Co-operation and Development

Disclaimer

This Safety Data Sheet (SDS) was prepared according to GB/T16483 and GB/T17519. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.