

SAFETY DATA SHEETS

According to the UN GHS revision 8

Version: 1.0

Creation Date: July 15, 2019

Revision Date: July 15, 2019



YATAI CHEMICAL CORP

1. SECTION 1: Identification

1.1. GHS Product identifier

Product name Tributylamine

1.2. Other means of identification

Other names Tributylamina; TRI-N-AMYLAMINE;
Tributylamine

1.3. Recommended use of the chemical and restrictions on use

Identified uses Industrial and scientific research uses.

Uses advised against no data available

1.4. Supplier's details

Company Yatai Chemical Corp
Address Room 20A5, No.585, Longhua West Road,
Shanghai, China

Telephone 0086-21-64563115

1.5. Emergency phone number

Emergency phone number 0086-21-64563115

Service hours Monday to Friday, 9am-5pm (Standard time zone:
UTC/GMT +8 hours).

2. SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Acute toxicity - Category 2, Dermal

Skin irritation, Category 2

Acute toxicity - Category 1, Inhalation

2.2. GHS label elements, including precautionary statements

Pictogram(s)



Signal word Danger

Hazard statement(s) H302 Harmful if swallowed
H310 Fatal in contact with skin
H315 Causes skin irritation
H330 Fatal if inhaled

Precautionary statement(s)

Prevention	P264 Wash ... thoroughly after handling.P270 Do not eat, drink or smoke when using this product.P262 Do not get in eyes, on skin, or on clothing.P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...P260 Do not breathe dust/fume/gas/mist/vapours/spray.P271 Use only outdoors or in a well-ventilated area.P284 [In case of inadequate ventilation] wear respiratory protection.
Response	P301+P317 IF SWALLOWED: Get medical help.P330 Rinse mouth.P302+P352 IF ON SKIN: Wash with plenty of water/...P316 Get emergency medical help immediately.P321 Specific treatment (see ... on this label).P361+P364 Take off immediately all contaminated clothing and wash it before reuse.P332+P317 If skin irritation occurs: Get medical help.P362+P364 Take off contaminated clothing and wash it before reuse.P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.P320 Specific treatment is urgent (see ... on this label).
Storage	P405 Store locked up.P403+P233 Store in a well-ventilated place. Keep container tightly closed.
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. Other hazards which do not result in classification

no data available

3. SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Tributylamine	Tributylamine	102-82-9	203-058-7	100%

4. SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled

Fresh air, rest.

Following skin contact

Rinse skin with plenty of water or shower.

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.

4.2. Most important symptoms/effects, acute and delayed

no data available

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

no data available

5. SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

5.2. Specific hazards arising from the chemical

Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Above 63°C explosive vapour/air mixtures may be formed.

5.3. Special protective actions for fire-fighters

Use water spray, powder, foam, carbon dioxide.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection: filter respirator for ammonia and organic ammonia derivatives adapted to the airborne concentration of the substance. Collect leaking and spilled liquid in sealable containers as far as possible. Cover the spilled material with inert absorbent.

6.2. Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

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. SECTION 7: Handling and storage

7.1. Precautions for safe handling

NO open flames. Above 63°C use a closed system and ventilation.

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities

Dry. Separated from strong oxidants, strong acids and food and feedstuffs.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

no data available

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 or eye protection in combination with breathing protection.

Skin protection

Protective gloves.

Respiratory protection

Use ventilation, local exhaust or breathing protection.

Thermal hazards

no data available

9. SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Clear to light yellow liquid
Colour	no data available
Odour	no data available
Melting point/freezing point	-70°C
Boiling point or initial boiling point and boiling range	215°C
Flammability	no data available
Lower and upper explosion limit/flammability limit	no data available
Flash point	70°C
Auto-ignition temperature	210°C
Decomposition	no data available

temperature	
pH	no data available
Kinematic viscosity	no data available
Solubility	In water: 0.386 g/L (25 °C)
Partition coefficient n-octanol/water	1.52
Vapour pressure	0.3 mm Hg (20 °C)
Density and/or relative density	0.778
Relative vapour density	6.38 (vs air)
Particle characteristics	no data available

10. SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

no data available

10.3. Possibility of hazardous reactions

The vapour is heavier than air. Decomposes on burning. This produces toxic gases including nitrogen oxides. The substance is a weak base. Reacts with oxidants and strong acids.

10.4. Conditions to avoid

no data available

10.5. Incompatible materials

no data available

10.6. Hazardous decomposition products

no data available

11. SECTION 11: Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

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

The substance is irritating to the skin. The substance is mildly irritating to the eyes.

STOT-repeated exposure

no data available

Aspiration hazard

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.

12. SECTION 12: Ecological information

12.1. Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

12.2. Persistence and degradability

no data available

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Other adverse effects

no data available

13. SECTION 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. SECTION 14: Transport information

14.1. UN Number

ADR/RID: UN2542 (For IMDG: UN2542 (For IATA: UN2542 (For

reference only, please
check.)

reference only, please
check.)

reference only, please
check.)

14.2. UN Proper Shipping Name

ADR/RID:

TRIBUTYLAMINE (For
reference only, please
check.)

IMDG:

TRIBUTYLAMINE (For
reference only, please
check.)

IATA:

TRIBUTYLAMINE (For
reference only, please
check.)

14.3. Transport hazard class(es)

ADR/RID: 6.1 (For
reference only, please
check.)

IMDG: 6.1 (For
reference only, please
check.)

IATA: 6.1 (For
reference only, please
check.)

14.4. Packing group, if applicable

ADR/RID: II (For
reference only, please
check.)

IMDG: II (For reference
only, please check.)

IATA: II (For reference
only, please check.)

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. SECTION 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
Tributylamine	Tributylamine	102-82-9	203-058-7
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.

16. SECTION 16: Other information

Information on revision

Creation Date July 15, 2019

Revision Date July 15, 2019

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/>

Any questions regarding this SDS, Please send your inquiry to ydcl@yataichemical.com

Disclaimer: 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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.