# Chemical Safety Data Sheet MSDS / SDS

# o-Anisidine

Revision Date: 2024-12-21 Revision Number: 1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### **Product identifier**

Product name : o-Anisidine

CBnumber : CB1286995

CAS : 90-04-0

EINECS Number : 201-963-1

Synonyms : o-anisidine,2-methoxyaniline

## Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

# **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

## Precautionary statements

P501 Dispose of contents/container to.....

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P311 Call a POISON CENTER or doctor/physician.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P271 Use only outdoors or in a well-ventilated area.

P270 Do not eat, drink or smoke when using this product.

P264 Wash skin thouroughly after handling.

P264 Wash hands thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P202 Do not handle until all safety precautions have been read and understood.

P201 Obtain special instructions before use.

#### **Hazard statements**

H401 Toxic to aquatic life

H373 May cause damage to organs through prolonged or repeated exposure

H371 May cause damage to organs

H351 Suspected of causing cancer

H350 May cause cancer

H341 Suspected of causing genetic defects

H331 Toxic if inhaled

H320 Causes eye irritation

H311 Toxic in contact with skin

H301 Toxic if swalloed

#### Disposal

WARNING.Cancer - https://oehha.ca.gov/proposition-65/chemicals/o-anisidine

# SECTION 3: Composition/information on ingredients

## **Substance**

Product name : o-Anisidine

Synonyms : o-anisidine,2-methoxyaniline

CAS : 90-04-0

EC number : 201-963-1

MF : C7H9NO

MW : 123.15

# SECTION 4: First aid measures

# Description of first aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

# 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. Take victim immediately to hospital. Consult a physician.

# In case of eye contact

Flush eyes with water as a precaution.

# If swallowed

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

# Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

# **Extinguishing media**

#### Suitable extinguishing media

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

# Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx)

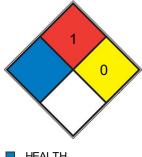
## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**



HEALTH

Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion

**FIRE** 1 can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia)

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)

SPEC. 

HAZ.

# SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Chemical Book

For personal protection see section 8.

#### **Environmental precautions**

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

## Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

# Precautions for safe handling

# Advice on safe handling

Avoid exposure - obtain special instructions before use. Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

For precautions see section 2.2.

## Conditions for safe storage, including any incompatibilities

## Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Light sensitive. Store under inert gas.

#### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# SECTION 8: Exposure controls/personal protection

# control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

# **Exposure controls**

#### Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as

#### NIOSH (US) or EN 166(EU).

Skin 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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Splash contact

Material: Nature latex/chloroprene Minimum layer thickness: 0,6 mm Break through time: 30 min

Material tested:Lapren? (KCL 706 / Aldrich Z677558, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **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

Where risk assessment shows air-purifying respirators are appropriate use a full- face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

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

#### **Exposure limits**

Potential occupational carcinogen. NIOSH REL: TWA 0.5 mg/m<sup>3</sup>, IDLH 50 mg/m<sup>3</sup>; OSHA PEL: TWA 0.5 mg/m<sup>3</sup>; ACGIH TLV: TWA 0.1 ppm (adopted).

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Appearance	light yellow liquid
Odour	No data available
Odour Threshold	No data available
рН	7.3 (1g/l, H2O, 20℃)
Melting point/freezing point	Melting point/range: 3 - 6 °C - lit.
Initial boiling point and boiling range	225 °C - lit.
Flash point	100 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	0,1 hPa at 25 °C - OECD Test Guideline 104

Vapour density	No data available
Relative density	1,092 g/cm3 at 25 °C - lit. No data available
Water solubility	14 g/l at 20 °C - OECD Test Guideline 105- soluble
Partition coefficient: n-octanol/water	log Pow: 1,16 at 23 °C - OECD Test Guideline 107
Autoignition temperature	400 °C at 1.001,2 - 1.004 hPa
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available
Henry's Law Constant	1.25 at 25 °C (approximate - calculated from water solubility and vapor pressure)

# Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# **Conditions to avoid**

No data available

# Incompatible materials

Strong oxidizing agents

# Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

# Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - male and female - 1.890 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 3,87 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h (OECD Test Guideline 405)

## Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

In vitro tests showed mutagenic effects Test Type: Ames test

Test system: S. typhimurium

Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471

Result: negative

Test Type: In vivo micronucleus test Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 474 Result: negative

Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

#### **Toxicity**

Acute oral LD50 for rats 2,000 mg/kg, wild birds 422 mg/kg, mice 1,400 mg/kg, rabbits 870 mg/kg (quoted, RTECS, 1985).

# **SECTION 12: Ecological information**

# **Toxicity**

## Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 2,18 mg/l - 48 h (OECD Test Guideline 202)

#### Toxicity to algae

static test EC50 - Desmodesmus subspicatus (green algae) - 33,9 mg/l - 72 h

(OECD Test Guideline 201)

# Toxicity to bacteria

Respiration inhibition EC50 - Sludge Treatment - 800 mg/l - 3 h

(OECD Test Guideline 209)

# Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 86 % - Readily biodegradable. (OECD Test Guideline 301F)

# **Bioaccumulative potential**

No data available

## Mobility in soil

No data available

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# Other adverse effects

Toxic to aquatic life.

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material

must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

#### Waste Disposal

Dissolve in combustible solvent (alcohols, benzene, etc.) and spray solution into furnace equipped with afterburner and scrubber, or burn spill residue on sand and soda ash absorbent in a furnace.

# Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

# **UN** number

ADR/RID: 2431 IMDG: 2431

# UN proper shipping name

ADR/RID: ANISIDINES IMDG: ANISIDINES IATA: Anisidines

#### Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

# **Packaging group**

ADR/RID: III IMDG: III IATA: III

#### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### Special precautions for user

No data available

# **SECTION 15: Regulatory information**

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

# Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

EC Inventory:Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

# SECTION 16: Other information

#### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit TWA: Time Weighted Average

# References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
Chemical Book

- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Other Information

Depending on the degree of exposure, periodic medical examination is suggested. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. See ICSC 0971.

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.