

SAFETY DATA SHEET

Date: October 25, 2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Aniline, 10X in acetate buffer
Catalog Number: 91057
Unit Size: 10mL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: <http://www.biotium.com>

2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008[CLP]

Acute Tox. 3
Skin Sens. 1
Eye Dam. 1
Muta. 2
Carc. 2
STOT RE 1
Aquatic Acute 1

Flam. Liq. 3
Skin Corr. 1A

Classificative according to Directive 1999/45/EC

Carc. Cat. 3; R40
Muta. Cat. 3; R68
T; R23/24/25-48/23/24/25
Xi; R41
R43
N; R50

Labelling according to Regulation (EC) No 1272/2008[CLP]**Hazard pictogram****Signal word** Danger**Hazard statements**

H226	Flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

Precautionary statements

P260 Do not breathe dust/fumes/gas/mist/vapours/spray
 P262 Do not get in eyes, on skin, or on clothing
 P264 Wash ... thoroughly after handling
 P271 Use only outdoors or in a well-ventilated area
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P282 Wear cold insulating gloves/face shield/eye protection
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth
 P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell
 P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor
 P403 + P233

HMS Classification

Health hazard: 0
 Flammability: 0
 Physical hazards: 0
NFPA Rating
 Health hazard: 0
 Fire: 0
 Reactivity Hazard: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No1278/2008
Aniline	62-53-3	200-539-3	612-008-00-7	<5%	Flam. Liq. 4; Acute Tox. 3; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 2; STOT RE 1; Aquatic Acute 1
Acetic acid	64-19-7	200-580-7	607-002-00-6	<5%	Flam. Liq. 3; Skin Corr. 1A; Eye Dam. 1

4. FIRST-AID MEASURES**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES**Suitable extinguishing media**

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at 4 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Substance Aniline

Value	Control parameter	Basis
TWA	2ppm	USA. ACGIH Threshold Limit Values (TLV)

Substance Acetic acid

Value	Control parameter	Basis
TWA	10.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)

Personal protective equipment

Hand 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.

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Aniline, 10X in acetate buffer
Appearance	Light yellow liquic
Odor	Faint
Odor threshold	None
pH	4.5
Melting point/freezing point	No information available
Boiling point	No information available
Flash point	No information available
Evaporate rate	No information available
Flammability	No information available
Explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	soluble
Partition coefficient:n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Aniline

Oral LD50 Rat - 250 mg/kg

Inhalation LC50 - Mouse - 4 h - 248 ppm

Dermal LD50 Rabbit - 836 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation None

Serious eye damage/eye irritation Rabbit- Severe eye irritation

Respiratory or skin sensitization May cause sensitisation by skin contact

Germ cell mutagenicity Laboratory experiments have shown mutagenic effects. In vitro tests showed mutagenic effects

Acute toxicity – Acetic acid

Oral LD50 Rat - 3,310 mg/kg

Inhalation LC50 Mouse - 1 h - 5620 ppm ; - Rat - 4 h - 11.4 mg/l

Dermal LD50 - Rabbit - 1,112 mg/kg**Other information on acute toxicity** no data available**Skin corrosion/irritation** Rabbit- Causes severe burns.**Serious eye damage/eye irritation** Rabbit- Corrosive to eyes**Respiratory or skin sensitization** No data available**Germ cell mutagenicity** No data available**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity no data available**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: Aniline: BW6650000 ; Acetic acid: AF1225000

12. ECOLOGICAL INFORMATION

Toxicity	Aniline- LC50 - Oncorhynchus mykiss (rainbow trout) - 10.6 mg/l - 96.0 h
	EC50 - Daphnia magna (Water flea) - 80 - 380 mg/l - 48 h
	semi-static test EC50 - Daphnia magna (Water flea) - 0.16 mg/l - 48 h
	EC50 - SELENASTRUM - 19 mg/l - 72 h
Acetic acid	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l - 96 h
	EC50 - Daphnia magna (Water flea) - > 300.82 mg/l - 48 h

Persistence and degradability**Biodegradation** Aniline aerobic - Exposure time 30 d Result: 90 % - Readily biodegradable

Acetic acid - aerobic - Exposure time 30 d Result: 99 % - Readily biodegradable

Mobility in soil no information available**Results of PBT and vPvB assessment** no information available**Other adverse effects** no information available**Additional information** no information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US)

UN number 1548
UN proper shipping name Aniline, 10X in acetate buffer
Transport hazard class 6.1
Packing group III
Environmental hazards none
Special precaution for user none

15. REGULATION INFORMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: No chemicals were found.

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.

Version no. 2

Reason for revision Correction to section 14.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.