

SAFETY DATA SHEET



1,3-BG Bottoms

Revision Date 23-Feb-2016
Issuing date 23-Feb-2016

SECTION 1: Identification

1.1. Product identifier

Identification of the substance/preparation

1,3-BG Bottoms

Chemical Name 1,3 Butanediol, manuf. of, by-products from, distn. residues
CAS-No 1030909-63-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance / Preparation Intermediate

1.3. Details of the supplier of the safety data sheet

Supplier **Everchem Specialty Chemicals**
1400 N. Providence Rd.
Media, PA 19063
USA
Phone: 484-234-5030

Product Information Phone: 484-234-5030
FAX: 484-234-5037
Website: www.everchem.com

1.4. Emergency telephone number

Emergency telephone number in USA, call 800 424 9300
outside USA, call 703 527 3887, collect calls accepted
available 24/7

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This substance is classified in accordance with paragraph (d) of §1910.1200 (GHS-US classification).***

Serious eye damage/eye irritation Category 1, H318***

OSHA Specified Hazards Not applicable.

2.2. Label elements

Labeling according to §1910.1200 (GHS-US labeling).***

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Hazard symbol(s)



Signal word

Danger***

Hazard statements

H318: Causes serious eye damage.***

Precautionary statements

Prevention

P280: Wear eye protection/face protection.***

Response

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor.***

2.3. Other hazards

None known

SECTION 3: Composition / information on ingredients

3.1. Substances

Component	CAS-No	Concentration (%)
1,3 Butanediol, manuf. of, by-products from, distn. residues	1030909-63-7	100

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Keep at rest. Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.

Eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Skin

Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

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Ingestion

Call a physician immediately. Do not induce vomiting without medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Main symptoms

cough.

Special hazard

Lung irritation.

4.3. Indication of any immediate medical attention and special treatment needed

General advice

Remove contaminated, soaked clothing immediately and dispose of safely. First aider needs to protect himself.

Treat symptomatically. If ingested, irrigate the stomach using activated charcoal.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

foam, dry chemical, carbon dioxide (CO₂), water spray

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of:

carbon monoxide (CO)

carbon dioxide (CO₂)

Combustion gases of organic materials must in principle be graded as inhalation poisons

Vapours are heavier than air and may spread along floors

5.3. Advice for firefighters

Special protective equipment for firefighters

Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

Precautions for firefighting

Cool containers / tanks with water spray. Dike and collect water used to fight fire. Keep people away from and upwind of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Avoid contact with skin and eyes. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Keep away from heat and sources of ignition. For emergency responders: Personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).

6.3. Methods and material for containment and cleaning up

Methods for containment

Stop the flow of material, if possible without risk. Dike spilled material, where this is possible.

Methods for cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Dispose of in accordance with local regulations. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

6.4. Reference to other sections

For personal protective equipment see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Advice on the protection of the environment

See Section 8: Environmental exposure controls.

Incompatible products

strong oxidizing agents
strong acids

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). In case of fire, emergency cooling with water spray should be available. Ground and bond containers when transferring material.

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Technical measures/Storage conditions

Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Exposure limits United States of America

No exposure limits established.

8.2. Exposure controls

Appropriate Engineering controls

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

Individual protection measures, such as personal protective equipment

General industrial hygiene practice

Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure that eyewash stations and safety showers are close to the workstation location.

Hygiene measures

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Eye protection

Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face.

Hand protection

Wear protective gloves. Recommendations are listed below. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

Suitable material	nitrile rubber
Evaluation	according to EN 374: level 6
Glove thickness	approx 0.55 mm
Break through time	> 480 min

Skin and body protection

Impervious clothing. Wear face-shield and protective suit for abnormal processing problems.

Respiratory protection

Respirator with filter for organic vapour. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Equipment should conform to NIOSH.

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Environmental exposure controls

If possible use in closed systems. If leakage can not be prevented, the substance needs to be suck off at the emersion point, if possible without danger. Observe the exposure limits, clean exhaust air if needed. If recycling is not practicable, dispose of in compliance with local regulations. Inform the responsible authorities in case of leakage into the atmosphere, or of entry into waterways, soil or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	light brown
Odour	petroleum-like
Odour threshold	No data available
pH	12 (500 g/l in water @ 25 °C (77 °F))
Melting point/range	No data available
Boiling point/range	> 350 °F (> 177 °C) @ 0,04 atm (4 kPa)
Flash point	> 200 °F (> 93 °C)
Method	closed cup
Evaporation rate	No data available
Flammability (solid, gas)	Does not apply, the substance is a liquid
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	***
Values	@ °C @ °F Method
~ 1,097***	20*** 68*** ASTM D 4052***
Solubility	No data available
log Pow	No data available
Autoignition temperature	No data available
Decomposition temperature	> 350 °F (> 177 °C) @ 40 hPa
Viscosity	No data available

9.2. Other information

Oxidizing properties	Does not apply, substance is not oxidising. There are no chemical groups associated with oxidizing properties
Explosive properties	Does not apply, substance is not explosive. There are no chemical groups associated with explosive properties

SECTION 10: Stability and reactivity

10.1. Reactivity

The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in any text book on organic chemistry.

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10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.***

10.4. Conditions to avoid

Avoid contact with heat, sparks, open flame and static discharge. Avoid any source of ignition.

10.5. Incompatible materials

strong acids, strong oxidizing agents.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure Ingestion, Inhalation, Eye contact, Skin contact***

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Main symptoms

cough.

Target Organ Systemic Toxicant - Single exposure

Due to lack of data, a classification is not possible for:

STOT SE***

Target Organ Systemic Toxicant - Repeated exposure

Due to lack of data, a classification is not possible for:

STOT RE***

Acute toxicity

1,3 Butanediol, manuf. of, by-products from, distn. residues (1030909-63-7)

Routes of Exposure	Endpoint	Values	Species	Method
Oral	LC0	> 2000 mg/kg	rat	OECD 423

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Assessment

Based on available data, the classification criteria are not met for:

Acute oral toxicity

For acute dermal toxicity, no data are available

For acute inhalation toxicity, no data are available***

Irritation and corrosion

1,3 Butanediol, manuf. of, by-products from, distn. residues (1030909-63-7)

Emergency telephone number

in USA, call 800 424 9300; outside USA, call USA 703 527 3887, collect calls accepted

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USA (A-US)

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Target Organ Effects	Species	Result	Method	
Skin	rabbit	No skin irritation	OECD 404	

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Assessment

Based on available data, the classification criteria are not met for:
skin irritation/corrosion

For eye irritation, no data are available

For respiratory irritation, no data are available***

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Assessment

For skin sensitization, no data are available

For respiratory sensitization, no data are available***

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Assessment

Due to lack of data, a classification is not possible for:

STOT RE***

Carcinogenicity, Mutagenicity, Reproductive toxicity					
1,3 Butanediol, manuf. of, by-products from, distn. residues (1030909-63-7)					
Type	Dose	Species	Evaluation	Method	
Mutagenicity	5000 µg/plate	Salmonella typhimurium	negative	OECD 471 (Ames)	
Mutagenicity	5000 µg/plate	Escherichia coli	negative		

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CMR Classification

The available data on CMR properties are summarized in the table above. They do not indicate a classification into categories 1A or 1B***

Evaluation

In vitro tests did not show mutagenic effects***

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Aspiration toxicity

no data available***

Note

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity			
1,3 Butanediol, manuf. of, by-products from, distn. residues (1030909-63-7)			
Species	Exposure time	Dose	Method
Pimephales promelas (fathead minnow)	96h	LC50: 3848 mg/l	ASTM E 729-96a

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Ceriodaphnia dubia	48h	LC50: 2596 mg/l	ASTM E 729-96a
Ceriodaphnia dubia	96h	LC50: 1783 mg/l	ASTM E 729-96a

12.2. Persistence and degradability

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Biodegradation

Not readily biodegradable.

12.3. Bioaccumulative potential

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

Bioaccumulative potential

No data available***

12.4. Mobility in soil

1,3 Butanediol, manuf. of, by-products from, distn. residues (1030909-63-7)		
Type	Result	Method
	no data available***	

12.5 Other adverse effects

1,3 Butanediol, manuf. of, by-products from, distn. residues, CAS: 1030909-63-7

No data available***

Note

Avoid release to the environment.

SECTION 13: Disposal considerations

Product Information

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.

Uncleaned empty packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Regulations concerning reuse or disposal of used packaging materials must be observed.

SECTION 14: Transport information

D.O.T. (49CFR)

Not restricted

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ICAO/IATA

Not restricted

IMDG

Not restricted

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code not applicable***

SECTION 15: Regulatory information

Federal and State Regulations

Components of the product are listed in the quoted regulations. For details please refer to the regulations directly. This list is not exhaustive, please check for other applicable regulations.

Federal Regulations

This product is listed on the TSCA inventory

International Inventories

1,3 Butanediol, manuf. of, by-products from, distr. residues, CAS: 1030909-63-7

NDSL (CA)

TSCA (US)

SECTION 16: Other information

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Hazard Rating Systems

NFPA (National Fire Protection Association)

Health Hazard 3***

Fire Hazard 1

Reactivity 0

HMIS (Hazardous Material Information System)

Health Hazard 3***

Flammability 1

Physical Hazard 0

Training advice

For effective first-aid, special training / education is needed.

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Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on Everchem owned data and public sources deemed valid or acceptable. The absence of data elements required by OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

Further information for the safety data sheet

For more information, other material safety data sheets or technical data sheets please consult the Everchem homepage (www.everchem.com).

Disclaimer

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End of Safety Data Sheet