

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 1/11

(30346099/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Baxxodur® EC 201

Recommended use of the chemical and restriction on use

Recommended use*: Chemical

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Molecular formula: C(10) H(22)N(2)
Chemical family: cyclic, diamines, aliphatic
Synonyms: 3-Aminomethyl-3,5,5-trimethylcyclohexylamine

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Acute Tox.	4 (dermal)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03
Version: 4.0

Page: 2/11
(30346099/SDS_GEN_US/EN)

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust or mist.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER, doctor/physician or emergency number 112.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P405	Store locked up.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 3/11

(30346099/SDS_GEN_US/EN)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
2855-13-2	>= 99.7 - <= 100.0%	3-aminomethyl-3,5,5-trimethylcyclohexylamine
133117-08-5	>= 0.1 - <= 0.1%	Cyclohexanecarbonitrile, 5-amino-1,3,3-trimethyl-

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. Immediate medical attention required.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Pulmonary odema prophylaxis. Medical monitoring for at least 24 hours.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

No particular hazards known.

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 4/11

(30346099/SDS_GEN_US/EN)

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund').

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Containers should be opened carefully in well-ventilated areas to avoid static discharge.

Protection against fire and explosion:

No explosion proofing necessary.

Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances. Segregate from isocyanates. Segregate from epoxides.

Suitable materials for containers: Carbon steel (Iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), glass, Low density polyethylene (LDPE), Stove-lacquer RDL 16

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Keep tanks under inert gas.

Keep away from sources of ignition - No smoking. Keep container tightly closed and in a cool place.

Storage stability:

Storage duration: 24 Months

From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 5/11

(30346099/SDS_GEN_US/EN)

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves, Suitable materials, polyvinylchloride (Pylox)

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

chemical-protection suit (f.e. according to EN 14605)

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Avoid inhalation of vapours/mists. Wear protective clothing as necessary to prevent contact.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	amine-like	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	colourless to yellow	
pH value:	11.6 (8.5 g/l, 20 °C)	
Freezing point:	10 °C (760 mmHg)	
Boiling point:	247 °C (760 mmHg)	
Flash point:	112 °C	(open cup)
Flammability:	Literature data. Product is combustible.	
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	380 °C	(DIN 51794)
SADT:	Study scientifically not justified.	
Vapour pressure:	0.0157 hPa (20 °C) dynamic	(measured)
Density:	0.92 g/cm ³ (20 °C)	
Relative density:	0.924 (20 °C)	
Partitioning coefficient n-octanol/water (log Pow):	0.99 (23 °C)	(Directive 92/69/EEC, A.8)
Self-ignition temperature:	not self-igniting	

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Page: 6/11

Version: 4.0

(30346099/SDS_GEN_US/EN)

Thermal decomposition:	< 400 °C (DSC (DIN 51007)) No exothermic decomposition within the mentioned temperature range. No decomposition if used as directed. It is not a self-decompositionable substance.
Viscosity, dynamic:	18 mPa.s (20 °C)
Viscosity, kinematic:	19 mm ² /s (20 °C) (OECD 114)
Solubility in water:	approx. 492 g/l (23.8 °C)
Molar mass:	170.30 g/mol
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.

10. Stability and Reactivity

Reactivity

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
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Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.
Exothermic reaction. Reacts with acids.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. See MSDS section 7 - Handling and storage.

Incompatible materials

strong oxidizing agents, acids, halogenated compounds
acids

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides

Thermal decomposition:

< 400 °C (DSC (DIN 51007))

No exothermic decomposition within the mentioned temperature range. No decomposition if used as directed. It is not a self-decompositionable substance.

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03
Version: 4.0

Page: 7/11
(30346099/SDS_GEN_US/EN)

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after short-term skin contact. Of moderate toxicity after single ingestion.

Oral

Type of value: LD50

Species: rat (male)

Value: 1,030 mg/kg (similar to OECD guideline 401)

Inhalation

Type of value: LC50

Species: rat

Value: > 5.01 mg/l (OECD Guideline 403)

Exposure time: 4 h

Dermal

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 402)

The European Union (EU) has classified this substance as 'harmful'.

Assessment other acute effects

Assessment of STOT single:

The available information is not sufficient for the evaluation of specific target organ toxicity.

Irritation / corrosion

Assessment of irritating effects: Corrosive! Damages skin and eyes.

Skin

Species: rabbit

Result: Corrosive.

Eye

Species: rabbit

Result: Risk of serious damage to eyes.

Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Guinea pig maximization test

Species: guinea pig

Result: sensitizing

Method: OECD Guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Page: 8/11

Version: 4.0

(30346099/SDS_GEN_US/EN)

Assessment of repeated dose toxicity: The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals.

Carcinogenicity

Assessment of carcinogenicity: Study scientifically not justified.

Reproductive toxicity

Assessment of reproduction toxicity: Repeated oral uptake of the substance did not cause damage to the reproductive organs. Study scientifically not justified.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See MSDS section 11 - Toxicological information.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) 110 mg/l, *Leuciscus idus* (Directive 84/449/EEC, C.1, semistatic)

Nominal values (confirmed by concentration control analytics)

Aquatic invertebrates

EC50 (48 h) 23 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Nominal values (confirmed by concentration control analytics)

EC50 (48 h) 388 mg/l, *Chaetogammarus marinus* (semistatic)

The details of the toxic effect relate to the nominal concentration.

Aquatic plants

EC50 (72 h) > 50 mg/l (growth rate), *Scenedesmus subspicatus* (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

EC10 (72 h) 11.2 mg/l (growth rate), *Scenedesmus subspicatus* (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03
Version: 4.0

Page: 9/11
(30346099/SDS_GEN_US/EN)

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 3 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)

Nominal values (confirmed by concentration control analytics)

Assessment of terrestrial toxicity

Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 8 bacterium/EC10 (18 h): 1,120 mg/l

Nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Not readily biodegradable (by OECD criteria).

Elimination information

8 % DOC reduction (28 d) (Directive 92/69/EEC, C.4-A) (aerobic, predominantly domestic sewage)

Assessment of stability in water

In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis)

< 10 % (5 d) (50 °C, pH value 7), (OECD Guideline 111, pH 7)

Bioaccumulative potential

Assessment bioaccumulation potential

No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

Bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected. Literature data.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Other ecotoxicological advice:

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 10/11

(30346099/SDS_GEN_US/EN)

13. Disposal considerations

Waste disposal of substance:

Incinerate in a licensed facility. Do not discharge substance/product into sewer system.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Hazard class: 8
Packing group: III
ID number: UN 2289
Hazard label: 8
Proper shipping name: ISOPHORONEDIAMINE

Sea transport

IMDG

Hazard class: 8
Packing group: III
ID number: UN 2289
Hazard label: 8
Marine pollutant: NO
Proper shipping name: ISOPHORONEDIAMINE

Air transport

IATA/ICAO

Hazard class: 8
Packing group: III
ID number: UN 2289
Hazard label: 8
Proper shipping name: ISOPHORONEDIAMINE

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK

NJ

CAS Number

2855-13-2

Chemical name

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Safety Data Sheet

Baxxodur® EC 201

Revision date : 2018/08/03

Version: 4.0

Page: 11/11

(30346099/SDS_GEN_US/EN)

NFPA Hazard codes:

Health: 3 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 3 Flammability: 1 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Acute Tox.	4 (dermal)	Acute toxicity
Acute Tox.	4 (oral)	Acute toxicity
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2018/08/03

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