

SAFETY DATA SHEET

Beclomethasone dipropionate

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

SECTION 1: Identification of	the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	Beclomethasone dipropionate
CAS number	5534-09-8
EC number	226-886-0
1.2. Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	For research purposes only.
Uses advised against	Not suitable for human consumption or veterinary purposes.
1.3. Details of the supplier of	the safety data sheet
Supplier	Molekula Ltd. Lingfield Way,
	Darlington,
	DL1 4XX,
	United Kingdom
	+44 (0) 3302000333

info@molekula.com

1.4. Emergency telephone number

+44 (0) 7769276927

SECTION 2: Hazards identification	
2.1. Classification of the subs	stance or mixture
Classification (SI 2019 No. 72	20)
Physical hazards	Not Classified
Health hazards	Skin Sens. 1 - H317 Repr. 1B - H360 STOT RE 2 - H373
Environmental hazards	Aquatic Chronic 4 - H413
2.2. Label elements	
EC number	226-886-0
Hazard pictograms	
Signal word	Danger
Hazard statements	H317 May cause an allergic skin reaction. H360 May damage fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements	 P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust. P261 Avoid breathing dust. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P308+P313 IF exposed or concerned: Get medical advice/ attention. P314 Get medical advice/ attention if you feel unwell. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up.
	P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current UK criteria.

SECTION 3: Composition/information on ingredients	
3.1. Substances	
Product name	Beclomethasone dipropionate
CAS number	5534-09-8
EC number	226-886-0
Chemical formula	C28H37CIO7

SECTION 4: First aid measures

4.1. Description of first aid m	easures
General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin contact	It is important to remove the substance from the skin immediately. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
4.2. Most important symptom	ns and effects, both acute and delayed
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Temporary irritation.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals.

Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	May be slightly irritating to eyes.
4.3. Indication of any immedia	te medical attention and special treatment needed
Notes for the doctor	Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.
SECTION 5: Firefighting meas	sures
5.1. Extinguishing media	
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire- extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising fr	om the substance or mixture
Specific hazards	None known.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen chloride (HCI).
5.3. Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.
SECTION 6: Accidental release	e measures
6.1. Personal precautions, pro	tective equipment and emergency procedures
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid contact with skin and eyes.
6.2. Environmental precaution	<u>s</u>
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.
6.3. Methods and material for	containment and cleaning up
Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.
6.4. Reference to other section	ns

6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	lling
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. May damage fertility or the unborn child. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.
7.2. Conditions for safe storag	e, including any incompatibilities
Storage precautions	Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.
	Store at temperatures between 2°C/35.6°F and 8°C/46.4°F.
Storage class	Miscellaneous hazardous material storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

8.1. Control parameters

Occupational exposure limits STEL:

TWA:

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection	Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'- marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges suitable for intended use should be used. Full face mask respirators with replaceable filter cartridges suitable for intended use should be used. Half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use should be used.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic phys	ical and chemical properties
Appearance	Crystalline powder.
Colour	White/off-white.
Odour	Not known.
Odour threshold	No information available.
рН	No information available.
Melting point	117-120°C/242.6-248°F
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	< 0.0000001 kPa @ 25°C/77°F
Vapour density	No information available.
Relative density	1.26 g/cm3
Solubility(ies)	Slightly soluble in water. Soluble in the following materials: Acetone. Chloroform. Alcohols.

Partition coefficient	: 3.49	
Auto-ignition temperature	No information available.	
Decomposition Temperature	No information available.	
9.2. Other information		
Molecular weight	521.04	
SECTION 10: Stability and rea	activity	
10.1. Reactivity		
Reactivity	See the other subsections of this section for further details.	
10.2. Chemical stability		
Stability	Stable under the prescribed storage conditions.	
10.3. Possibility of hazardous	reactions	
Possibility of hazardous reactions	No potentially hazardous reactions known.	
10.4. Conditions to avoid		
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.	
10.5. Incompatible materials		
Materials to avoid	Strong oxidising agents.	
10.6. Hazardous decomposition products		
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances:	
	Harmful gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO). Hydrogen chloride (HCl).	
SECTION 11: Toxicological in	formation	
11.1. Information on toxicologi	ical effects	
Acute toxicity - oral		
Summary	Based on available data the classification criteria are not met.	
Acute toxicity - dermal Summary	Based on available data the classification criteria are not met.	
Acute toxicity - inhalation Summary	Based on available data the classification criteria are not met.	
Skin corrosion/irritation Summary	Based on available data the classification criteria are not met.	
Serious eye damage/irritation Summary	Based on available data the classification criteria are not met.	
Respiratory sensitisation Summary	Based on available data the classification criteria are not met.	
Skin sensitisation Summary	May cause an allergic skin reaction.	

Germ cell mutagenicity Summary	Based on available data the classification criteria are not met.
-	Dased on available data the classification offend are not met.
<u>Carcinogenicity</u> Summary	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Summary	May damage fertility or the unborn child.
Specific target organ toxicity -	- single exposure
Summary	Based on available data the classification criteria are not met.
Specific target organ toxicity -	- repeated exposure
Summary	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	
Summary	Not relevant. Solid.
General information	May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Temporary irritation.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	May be slightly irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.
SECTION 12: Ecological info	rmation
12.1. Toxicity	
Acute aquatic toxicity	
Summary	Based on available data the classification criteria are not met.
Chronic aquatic toxicity	
Summary	May cause long lasting harmful effects to aquatic life.
12.2. Persistence and degrad	lability
Persistence and degradability	The degradability of the product is not known.
12.3. Bioaccumulative potent	ial
Bioaccumulative potential	No data available on bioaccumulation.
Destition coefficient	: 3.49
Partition coefficient	. 3.49
12.4. Mobility in soil	. 3.49
	No data available.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal co	nsiderations
13.1. Waste treatment me	thods
General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended).
	The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment
	Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
	EH40/2005 Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information		
Abbreviations and acronyms used in the safety data sheet	 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC50: Lethal Concentration to 50 % of a test population. LD50: Lethal Dose to 50% of a test population (Median Lethal Dose). EC₅₀: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. 	
Classification abbreviations and acronyms	Repr. = Reproductive toxicity Skin Sens. = Skin sensitisation STOT RE = Specific target organ toxicity-repeated exposure Aquatic Chronic = Hazardous to the aquatic environment (chronic)	
Classification procedures according to SI 2019 No. 720	STOT RE 2 - H373: Skin Sens. 1 - H317: Repr. 1B - H360: : Expert judgement. Aquatic Chronic 4 - H413: : Expert judgement.	
Training advice	Only trained personnel should use this material.	
Revision date	06/03/2023	
Revision	1	
SDS number	2178	
Hazard statements in full	H317 May cause an allergic skin reaction. H360 May damage fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H413 May cause long lasting harmful effects to aquatic life.	

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.