1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]quinidinium bromide



Date of issue:	25.06.2024
Revision date:	-
Version:	1
Replaces version:	-

<b>SECTION 1: Identification of the su</b>	ubstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: 1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]-quinidinium bromide
EC No	:-
CAS No	: 1455358-19-6
Formula	: C36H40Br3N2O4+
Synonym	: (9S)-1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]-9-hydroxy-6'-methoxy-Cinchonanium bromide (1:2)
1.2. Relevant identified uses of the su	bstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Industrial use. Professional use.
Use of the substance/mixture	: Research and synthesis development Catalyst
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safe	ty data sheet
Manufacturer/Supplier	
Buchler GmbH Harxbuetteler Straße 3 38110 Braunschweig – Germany T +49 5307 9310 www.buchler-gmbh.com info@buchler-gmbh.com	

Safety data sheet: DLAC Dienstleistungsagentur Chemie GmbH, E-Mail: sds@dlac-gmbh.de

Country	Organisation/Company	Address	Emergency number
Germany	BUCHLER GmbH (A member of the FAGUS Group)	Harxbütteler Str. 3 38110 Braunschweig Germany	+49 1791437208 (German/English) (Mo-Fr 8:00-16:00)

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP] Acute toxicity (oral), Category 4 H302
Full text of H statements: see section 16
Adverse physicochemical, human health and environmental effects Harmful if swallowed.
2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) : GHS07

: Warning

: H302 - Harmful if swallowed.



	1,1′-bis[(2-bromo-5-methoxyphenyl)methyl]- quinidinium bromide	Date of issue:	25.06.2024
		Revision date:	-
		Version:	1
		Replaces version:	-
Precautionary statements (CL	P) : P264 - Wash hands thoroughly after P270 - Do not eat, drink or smoke P301+P312 - IF SWALLOWED: Ca P501 - Dispose of contents/contain accordance with local, regional, na	when using this product. all a POISON CENTER, doctor if yo ner to hazardous or special waste c	collection point, in

2.3. Other hazards

Contains no substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

<b>SECTION 3: Composition/information</b>	n on ingredients			
3.1. Substances				
Substance name	ne : 1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]-quinidinium bromide			
EC No	: -			
CAS No	: 1455358-19-6			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]- quinidinium bromide	(CAS No) 1455358-19-6	≤ 100	Acute Tox. 4 (Oral), H302	
Full text of H-statements: see section 16				
3.2. Mixtures				
Not applicable				
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general		Never give anyth	ossible, show him this sheet. Failing this, ing by mouth to an unconscious person.	
First-aid measures after inhalation	: Remove victim to fresh air and ke	ep at rest in a po	sition comfortable for breathing.	
First-aid measures after skin contact	: Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water.			
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with and easy to do. Continue rinsing.	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
First-aid measures after ingestion	: Rinse mouth. Drink water as a pre feel unwell.	: Rinse mouth. Drink water as a precaution. Call a POISON CENTER or doctor/physician if you		
4.2. Most important symptoms and effect	ts, both acute and delayed			
Symptoms/injuries			ache, tinnitus, visual disturbances, , vomiting, diarrhoea), exanthema and	
Symptoms/injuries after ingestion	: Harmful if swallowed.			
4.3. Indication of any immediate medical	attention and special treatment ne	eded		
Treat symptomatically.				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Adapt extinguishing agent to suit extinguishing powder.	he environment.	Water spray. Foam. Carbon dioxide. Dry	
Unsuitable extinguishing media	: Do not use a heavy water stream.			
5.2. Special hazards arising from the sub	ostance or mixture			
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO <sub>2</sub> ). Nitroge	en oxides.		
5.3. Advice for firefighters				
Firefighting instructions	: Use water spray or fog for cooling environment.	exposed contail	ners. Prevent fire-fighting water from entering	
Protection during firefighting	: Use a self-contained breathing ap	paratus and also	a protective suit (EN 469).	

# Safety Data Sheet according to Regulation (EU) 2020/878

# 1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]quinidinium bromide



Date of issue:	25.06.2024
Revision date:	-
Version:	1
Replaces version:	-

SECTION 6: Accidental release m	easures
6.1. Personal precautions, protective	equipment and emergency procedures
General measures	: Stop leak if safe to do so. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust.
6.1.1. For non-emergency personnel	
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required. Wear suitable respiratory equipment in case of insufficient ventilation. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Prevent entry to sewers and public waters. N	lotify authorities if the substance enters sewers or public waters.
6.3. Methods and material for contain	nment and cleaning up
Methods for cleaning up	: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Minimize generation of dust. Dispose of in accordance with relevant local regulations.
6.4. Reference to other sections	
Concerning personal protective equipment to	use, see section 8. Concerning disposal elimination after cleaning, see section 13.
<b>SECTION 7: Handling and storage</b>	9
7.1. Precautions for safe handling	
Precautions for safe handling	: Provide local exhaust or general room ventilation. Wear personal protective equipment. Avoid dust formation. Do not breathe dust. Avoid contact with skin and eyes.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, incl	uding any incompatibilities
Storage conditions	: Store in original container. Store tightly closed in a dry and cool place. Keep out of direct sunlight. Protect from moisture.
Prohibitions on mixed storage	: Keep away from food, drink and animal feedingstuffs.
7.3. Specific end use(s)	
No additional information available	

<b>SECTION 8: Exposure c</b>	ontrols/personal protection	
8.1. Control parameters		
1,1'-bis[(2-bromo-5-methoxy	phenyl)methyl]-quinidinium bromide (1455358-19-6)	
Ireland	Local name	Dusts non-specific
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ (total inhalable) 4 mg/m³ (respirable)
United Kingdom	Local name	Dust
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (total inhalable) 4 mg/m³ (respirable)

#### 8.2. **Exposure controls**

# Appropriate engineering controls:

Provide local exhaust or general room ventilation to minimize dust concentrations.

# Hand protection:

Wear suitable gloves (EN 374). Nitrile rubber. Butyl rubber. 0.4 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

# Eye protection:

Chemical goggles or safety glasses (EN 166).

### Skin and body protection:

Wear suitable protective clothing (EN 344).



# 1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]quinidinium bromide

Date of issue:	25.06.2024
Revision date:	-
Version:	1
Replaces version:	-

# **Respiratory protection:**

Where exposure through inhalation may occur from use, respiratory protection is recommended. Dust production: dust mask with filter type P2.

## Environmental exposure controls:

Avoid release to the environment.

<b>SECTION 9: Physical and chemical p</b>	roperties	
9.1. Information on basic physical and cl	nemical properties	
Physical state	: Solid, powder	
Colour	: White - Yellow	
Odour	: Odourless	
Melting point/freezing point	: No data available	
Boiling point or initial boiling point and boiling range	: No data available	
Flammability	: No data available	
Lower and upper explosion limit	: Not applicable	
Flash point	: Not applicable	
Auto-ignition temperature	: Not applicable	
Decomposition temperature	: No data available	
рН	: No data available	
Kinematic viscosity	: Not applicable	
Solubility	: No data available	
Partition coefficient n-octanol/water (log value)	: 4.4613 (QSAR)	
Vapour pressure	: No data available	
Density and/or relative density	: No data available	
Relative vapour density	: Not applicable	
Particle characteristics	: No data available	
9.2. Other information		
Explosive properties	: The substance is not explosive.	
Oxidising properties	: The substance has no oxidising properties.	
	0, 1	
SECTION 10: Stability and reactivity		
10.1. Reactivity		
No dangerous reactions known under normal cor	iditions of use.	
10.2. Chemical stability		
Stable under use and storage conditions as record	mmended in section 7.	
10.3. Possibility of hazardous reactions		
None under normal use.		
10.4. Conditions to avoid		
Direct sunlight. High temperature.		
10.5. Incompatible materials		
Oxidising agents.		
10.6. Hazardous decomposition products		
In case of fire: Carbon monoxide. Carbon dioxide	. Nitrogen oxides.	
SECTION 11: Toxicological informati	on	
	fined in Regulation (EC) No 1272/2008	
Acute toxicity	: Oral: Harmful if swallowed.	
1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]-	auinidinium bromide (1455358-19-6)	
LD50 oral	1605.86 mg/kg (QSAR via T.E.S.T.)	
Skin corrosion/irritation	: Not classified	
	Based on available data, the classification criteria are not met	
25.06.2024	EN (English)	4/7

# Safety Data Sheet according to Regulation (EU) 2020/878

### BUCHL E R A Member of the FAGUS Group

1,1'-bis[(2-bro quinidinium b	mo-5-methoxyphenyl)methyl]- romide	Date of issue:	25.06.2024
4		Revision date:	_
		Version:	1
		Replaces version:	-
Serious eye damage/irritation	: Not classified		
	Based on available data, the classificat	tion criteria are not met	
Respiratory or skin sensitisation	: Not classified		
	Based on available data, the classificat	tion criteria are not met	
Germ cell mutagenicity	: Not classified		
	Based on available data, the classificat	tion criteria are not met	
Carcinogenicity	: Not classified	tion critoria are not mot	
Reproductive toxicity	Based on available data, the classificat : Not classified	Ion chiena are not met	
	Based on available data, the classificat	tion criteria are not met	
Specific target organ toxicity (single exposure)	: Not classified		
	Based on available data, the classificat	tion criteria are not met	
Specific target organ toxicity (repeated	: Not classified		
exposure)	Based on available data, the classificat	tion criteria are not met	
Aspiration hazard	: Not classified		
	Based on available data, the classificat	tion criteria are not met	
11.2. Information on other hazards			
11.2.1. Endocrine disrupting properties			
Endocrine disruption for human health	: The substance has no endocrine disru	oting properties.	
44.0.0 Others information			
11.2.2. Other information			
Potential adverse human health effects and symptoms	<ul> <li>Signs of cinchonism: Neurotoxic effects confusion), gastrointestinal disorders (ε haematological disorders.</li> </ul>		
SECTION 12: Ecological information			
12.1. Toxicity			
Acute aquatic toxicity	: Not classified		
Chronic aquatic toxicity	: Not classified		
12.2. Persistence and degradability			
No additional information available			
12.3. Bioaccumulative potential			
1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]	-quinidinium bromide (1455358-19-6)		
Log Pow	4.4613 (QSAR)		
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB assessme	ent		
This substance does not meet the PBT- or vPvB	criteria of REACH regulation, annex XIII.		
12.6. Endocrine disrupting properties			
Endocrine disruption for the environment	: The substance has no endocrine disrup	oting properties.	
12.7. Other adverse effects			
No additional information available			
SECTION 13: Disposal consideration	ns		
13.1. Waste treatment methods			
Regional legislation (waste)	: Dispose in a safe manner in accordance	e with local/national regulation	S.
Waste treatment methods	: This material and its container must be domestic waste. Do not empty into drai	disposed of as hazardous was	
Waste disposal recommendations	<ul> <li>Empty the packaging completely prior t recyclable like any other packing.</li> </ul>		, containers are
European List of Waste (LoW) code	: 07 00 00 - WASTES FROM ORGANIC		
Luropean List of YVASIE (LUYY) COUE	07 00 00 - WASTES FROM ORGANIC 07 01 00 - wastes from the manufactur chemicals		(MFSU) of basic organic

Safety Data Sheet according to Regulation (EU) 2020/878



# 1,1′-bis[(2-bromo-5-methoxyphenyl)methyl]quinidinium bromide

Date of issue:	25.06.2024
Revision date:	-
Version:	1
Replaces version:	-

	Replaces version
Waste code	: The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.
<b>SECTION 14: Transport information</b>	n
In accordance with ADR / IMDG / IATA	
14.1. UN number or ID number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
- Overland transport	
Not applicable	
- Transport by sea	
Not applicable	
- Air transport	
Not applicable	
14.7. Maritime transport in bulk accordi	ng to IMO instruments
Not applicable	
SECTION 15: Regulatory information	
	regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	
REACH Annex XIV (Authorisation List)	
Contains no substance(s) listed on REACH An	nex XIV (Authorisation List).
REACH Candidate List (SVHC)	
	I Candidate Liet
Contains no substance(s) listed on the REACH	



# 1,1'-bis[(2-bromo-5-methoxyphenyl)methyl]-<br/>quinidinium bromideDate of issue:<br/>25.06.2024Revision date:<br/>Version:-Version:1Replaces version:-

# PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals).

### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants).

### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer).

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors).

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances).

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

For this substance a chemical safety assessment was not carried out.

SECTION 16: Other information	
Data source	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Changes compared to earlier Versions	:-

### Abbreviations and acronyms:

ADDIEVIALIONS and	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
DNEL	Derived-No Effect Level
EC50	The effective concentration of substance that causes 50 % of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50 % of a test population (Median Lethal Dose)
NOEC	No-Observed Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

## Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
H302	Harmful if swallowed.

### SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.