# **Safety Data Sheet**

## 1. Identification of the substance

1.1. Product identifiers:	Product Name: Synonyms:	2,3-Difluoro-4-methoxybenzyl bromide
	Catalog number: CAS Number:	QF-9802 689254-23-7
1.2. Identified use:	Laboratory chemicals, f	or scientific research and development only.
1.3. Supplier:	Combi-Blocks, Inc., 79 635-8950. Email: sales	49 Silverton Ave # 915, San Diego, CA 92126, USA. Tel: 858- @combi-blocks.com.
1.4. Emergency Contact:	During normal business hours (Monday-Friday 8am-5pm PST), call 1-858-635-8950. After business hours, call Infotrac at 1-800-535-5053 (USA) or 1-352-323-3500 (international).	

# 2. Hazards identification

2.1. Classification of the substance or mixture: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

> Skin corrosion/irritation (Category 1A, B, C), H314 Serious eye damage/eye irritation (Category 1), H318

2.2. GHS Label elements, including precautionary statements:

Signal wordDangerHazard statement(s).H314H314Causes severe skin burns and eye damageH318Causes serious eye damagePrecautionary statement(s).P260Do not breathe dust/fume/gas/mist/vapours/spray.P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.P405Store locked up.	Pictograms	
H314Causes severe skin burns and eye damageH318Causes serious eye damagePrecautionary statement(s).P260Do not breathe dust/fume/gas/mist/vapours/spray.P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	Signal word	Danger
H318Causes serious eye damagePrecautionary statement(s).P260Do not breathe dust/fume/gas/mist/vapours/spray.P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	Hazard statement(s).	
Precautionary statement(s).P260Do not breathe dust/fume/gas/mist/vapours/spray.P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	H314	Causes severe skin burns and eye damage
P260Do not breathe dust/fume/gas/mist/vapours/spray.P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	H318	Causes serious eye damage
P264Wash thoroughly after handling.P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	Precautionary statement(	(s).
P280Wear protective gloves/protective clothing/eye protection/face protection.P301+P310+P330+P331If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
<ul> <li>P301+P310+P330+P331 If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.</li> <li>P303+P361+P353+P310 If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.</li> <li>P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.</li> <li>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 or doctor/physician.</li> <li>P363 Wash contaminated clothing before reuse.</li> </ul>	P264	Wash thoroughly after handling.
Do NOT induce vomiting.P303+P361+P353+P310If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	P280	Wear protective gloves/protective clothing/eye protection/face protection.
skin with water/shower. Immediately call a POISON CENTER or doctor/physician.P304+P340+P310If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breath- ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	P301+P310+P330+P33	
ing. Immediately call a POISON CENTER or doctor/physician.P305+P351+P338+P310If 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 or doctor/physician.P363Wash contaminated clothing before reuse.	P303+P361+P353+P31	
if present and easy to do, continue rinsing. Immediately call a POISON CENTER or doctor/physician.P363Wash contaminated clothing before reuse.	P304+P340+P310	1 1
-	P305+P351+P338+P31	if present and easy to do, continue rinsing. Immediately call a POISON CENTER or
P405 Store locked up.	P363	Wash contaminated clothing before reuse.
- ··· · ······························	P405	Store locked up.
<i>P501</i> Dispose of contents/container to an approved waste disposal plant.	P501	Dispose of contents/container to an approved waste disposal plant.

## 3. Composition/information on ingredients.

3.1.	Substances		
	Component	CLASSIFICATION	CONCENTRATION
	2,3-Difluoro-4-methoxybenzyl bromide	H314, H318	$\leq 100$

See Section 2 for full text of hazard statements.

# 4. First aid measures

4.1. Description of 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:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Im- mediately call a POISON CENTER or doctor/physician.
In case of skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
In case of eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If swallowed:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

- 4.2. *Most important symptoms and effects, both acute and delayed:* See Section 2.2 and/or in Section 11.
- 4.3. Indication of any immediate medical attention and special treatment needed: No data.

## 5. Fire fighting measures

- 5.1. Extinguishing media: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- 5.2. Special hazards arising from the substance or mixture: Carbon monoxide, hydrogen fluoride, hydrogen bromide.
- 5.3. Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4. Further information: No data available.

#### 6. Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Use personal protective equipment.
- 6.2. *Environmental precautions:* Should not be released into the environment. See Section 12 for additional ecological information.
- 6.3. *Methods and materials for containment and cleaning up:* Sweep up or vacuum up spillage and collect in suitable container for disposal.
- 6.4. *Reference to other sections:* Refer to protective measures listed in Sections 8 and 13.

## 7. Handling and storage

- 7.1. *Precautions for safe handling:* Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.
- 7.2. Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3. Specific end use(s): Laboratory chemicals, for scientific research and development only.

## 8. Exposure Controls / Personal protection

8.1. Control parameters:

*Components with workplace control parameters:* Contains no substances with occupational exposure limit values. *8.2. Exposure controls:* 

Appropriate engineering controls: Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use only under a chemical fume hood.

Personal protective equipment:

Eye/face protection:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin 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
Body Protection:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection:	No protective equipment is needed under normal use conditions.

*Control of environmental exposure:* Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

•		
(a)	Appearance:	Solid
(b)	Odour:	No data
(c)	Odour Threshold:	No data
(d)	pH:	No data
(e)	Melting point/freezing point:	90 - 100°C
(f)	Initial boiling point and boiling range:	No data
(g)	Flash point:	No data
(h)	Evaporatoin rate:	No data
(i)	Flammability (solid, gas):	No data
(j)	Upper/lower flammability or explosive limits:	No data
(k)	Vapour pressure:	No data
(1)	Vapour density:	No data
(m)	Relative density:	No data
(n)	Water solubility:	No data
(o)	Partition coefficient: n-octanol/water:	No data
(p)	Auto-ignition:	No data
(q)	Decomposition temperature:	No data
(r)	Viscosity:	No data
(s)	Explosive properties:	No data
(t)	Oxidizing properties:	No data

9.2. Other safety information:

Formula	$C_8H_7BrF_2O$
Molecular weight	237.0
CAS Number	689254-23-7

## **10. Stability and reactivity**

- 10.1. Reactivity No data
- 10.2. Chemical stability Stable under recommended storage conditions.
- 10.3. Possibility of hazardous reactions No data
- 10.4. Conditions to avoid
- 10.5. Incompatible material Explosives, spontaneously combustible substances, oxidizing substances, organic peroxides, .
- 10.6. Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions:		Carbon monoxide, hydrogen fluoride, hydrogen
	bromide.	
Other decomposition products:	No data	
In the event of fire:	See Section 5.	

#### 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:		
Skin irritation/corrosion:	No data available.	
Eye damage/irritation:	Causes severe skin burns and eye damage. Causes serious eye damage.	
Respiratory or skin sensitization:	No data available.	
Germ cell mutagenicity:	No data available.	
Carcinogenicity:	No data available.	
Reproductive toxicity:	No data available.	
Specific target organ system toxicity - single exposure: No data available.		
Specific target organ system toxicity - repeated exposure: No data available.		

Aspiration hazard:	No data available.
Additional information:	To the best of our knowledge, the chemical, physical and toxicological proper-
	ties of this substance have not been thoroughly investigated.

### 12. Ecological information

12.1.	Toxicity	No data available.
12.2.	Persistence and degradability	No data available.
12.3.	Bioaccumulative potential	No data available
12.4.	Mobility in soil	No data available
12.5.	Results of PBT and vPvB assessment	t No data available.
12.6.	Other adverse effects	No data available.

## 13. Disposal Considerations

13.1. Waste treatment methods

Product

Arrange disposal as special waste, by licensed disposal company, in consultation with local waste disposal authority, in accordance with national and regional regulations. Contaminated packaging Dispose of as unused product.

# 14. Transportation information

DOT (US), IMDG and IATA:

UN Number:	UN3261	Class: 8	Packing group: II
Proper shipping name:	CORROSIV	E SOLID, AC	IDIC, ORGANIC, N.O.S. (2,3-Difluoro-4-methoxybenzyl bro-
	mide)		

#### 15. Regulatory information

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, or have known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

## 16. Other information

This MSDS is correct to the best of our knowledge at the date of publication but does not purport to be all inclusive and shall be used only as a guide. Combi-Blocks shall not be held liable for any injury or damage resulting from handling or from contact with the above product.