# Safety Data Sheet

## 1. Identification of the substance

1.1. Product identifiers:	Product Name: Synonyms:	4,4'-Azodibenzoyl dichloride	
	Catalog number: CAS Number:	QF-4465 10252-29-6	
1.2. Identified use:	Laboratory chemicals, for scientific research and development only.		
1.3. Supplier:	Combi-Blocks, Inc., 7949 Silverton Ave # 915, San Diego, CA 92126, USA. Tel: 858-635-8950. Email: sales@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 Hazardous to the aquatic environment, acute hazard (Category 1), H400

2.2. GHS Label elements, including precautionary statements:

Pictograms				
Signal word	Danger			
Hazard statement(s).				
H314	Causes severe skin burns and eye damage			
H400	Very toxic to aquatic life			
Precautionary statement(s).				
P260	Do not breathe dust/fume/gas/mist/vapours/spray.			
P264	Wash thoroughly after handling.			
P273	Avoid release to the environment.			
P280	Wear protective gloves/protective clothing/eye protection/face protection.			
<i>P301+P310+P330+P331</i> If swallowed: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.				
P303+P361+P353+P3	<i>10</i> 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.			
P304+P340+P310	If 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+P3	10 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.			
P363	Wash contaminated clothing before reuse.			
P391	Collect spillage.			
P405	Store locked up.			
P501	Dispose of contents/container to an approved waste disposal plant.			

## 3. Composition/information on ingredients.

# 3.1. Substances

Component	CLASSIFICATION	CONCENTRATION
4,4'-Azodibenzoyl dichloride	H314, H400	$\leq 100$

See Section 2 for full text of hazard statements.

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. Immediately 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, nitrogen oxides, hydrogen chloride.
- 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: Store refrigerated. 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:	The type of protective of	g against chemicals, Flame retardant antistatic protective clothing., equipment must be selected according to the concentration and s substance at the specific workplace.
	Respi	ratory protection:	No protective equipment is needed under normal use conditions.	
	Contro	ol of environmenta	<i>l exposure:</i> Prevent furt drains.	her leakage or spillage if safe to do so. Do not let product enter
9. Physic	al and	chemical properti	es	
9.1.	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:		ezing point:	160 - 170°C
	(f) Initial boiling point and boiling range:		int and boiling range:	No data
	(g)	Flash point:		No data
	(h)	Evaporatoin rate:		No data
	(i)	Flammability (so	lid, gas):	No data
	(j)	•	mability or explosive lim	its: No data
	(1-)	Van ann ann ann ann	- 1	N. J. J.

- Vapour pressure: No data (k) No data (1) Vapour density: (m) Relative density: No data Water solubility: No data (n) (0) Partition coefficient: n-octanol/water: No data No data Auto-ignition: (p) Decomposition temperature: No data (q) No data (r) Viscosity: (s) Explosive properties: No data No data (t) Oxidizing properties:
- 9.2. Other safety information:

Formula	$C_{14}H_8Cl_2N_2O_2$
Molecular weight	307.1
CAS Number	10252-29-6

#### 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, nitrogen oxides, hydrogen chlo-

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.
Respiratory or skin sensitization:	No data available.
Germ cell mutagenicity:	No data available.

ride.

Carcinogenicity:	No data available.			
Reproductive toxicity:	No data available.			
Specific target organ system toxici	ty - 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	Very toxic to aquatic life.
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 assess	ment 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: III
Proper shipping name:	CORROSIV	E SOLID, AC	CIDIC, ORGANIC, N.O.S. (4,4'-Azodibenzoyl dichloride)

#### 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.