

5-Carboxyphthalide Safety Data Sheet 2H25127 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 01/12/2015 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Substance
Substance name	: 5-Carboxyphthalide
CAS No	: 4792-29-4
Product code	: 2H25-1-27
Formula	: C9H6O4
Synonyms	: 1,3-Dihydro-1-oxoisobenzofuran-5-carboxylic acid; 1,3-Dihydro-1-oxo-2-benzofuran-5-
Cynonymo	carboxylic acid
Other means of identification	: MFCD04117971
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Use of the substance/mixture	: Laboratory chemicals
	Manufacture of substances Scientific research and development
1.3. Details of the supplier of the sa	ifety data sheet
SynQuest Laboratories, Inc.	
P.O. Box 309	
Alachua, FL 32615 - United States of Ameri	ica
T (386) 462-0788 - F (386) 462-7097 info@synguestlabs.com - www.synguestlab	ns com
1.4. Emergency telephone number	
	: (844) 523-4086 (3E Company - Account 10069)
Emergency number	. (044) 323-4000 (SE COMPANY - ACCOUNT 10008)
SECTION 2: Hazard(s) identificat	tion
2.1. Classification of the substance	
Classification (GHS-US)	
Eye Irrit. 2A H319 - Causes serious eye	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	irritation bry irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	irritation bry irritation : : : : : : : : : : : : : : : : :
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	irritation bry irritation : : : irritation : : : : : : : : : : : : : : : : :
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	irritation by irritation : irritation : irritation GHS07 : Warning : H315 - Causes skin irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling	 irritation by irritation : irritation : irritation : irritation : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : GHS07 : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation <
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : irritation : irritation : H315 - Causes skin irritation H319 - Causes serious eye irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : GHS07 : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : irritation : irritation : H315 - Causes skin irritation H319 - Causes serious eye irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation by irritation : irritation : irritation : irritation : irritation : Warning : H315 - Causes skin irritation H315 - Causes serious eye irritation H319 - Causes serious eye irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contaction
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation my irritation : H315 - Causes skin irritation H315 - Causes skin irritation H319 - Causes serious eye irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contal lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label)
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation my irritation : i irritation : i irritation : i irritation : GHS07 : Warning : H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contal lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	 irritation ny irritation irritation irr
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation my irritation irritation ir
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation ny irritation irritation irr
Eye Irrit. 2A H319 - Causes serious eye STOT SE 3 H335 - May cause respirato Full text of H-phrases: see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 irritation my irritation : H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H335 - May cause respiratory irritation : P261 - Avoid breathing dust, mist P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contate lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P332+P313 - If skin irritation occurs: Get medical advice/attention P332+P313 - If eye irritation persists: Get medical advice/attention P332+P313 - If eye irritation persists: Get medical advice/attention P332+P333 - Store in a well-ventilated place. Keep container tightly closed

5-Carboxyphthalide Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of	f contents/container to	an approved	waste disposal	plant
		an approvou	maore arepeear	picaire

2.3.	Other hazards				
NO addit 2.4.	ional information available				
2.4. Not appl	Unknown acute toxicity (GHS US)				
	ON 3: Composition/information	on in	gredients		
3.1.	Substance				
Substan	ce type :	Mono	-constituent		
Name			Product identifier	%	Classification (GHS-US)
5-Carbo (Main coi	xxyphthalide nstituent)		(CAS No) 4792-29-4	<= 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Full text	of H-phrases: see section 16				
3.2.	Mixture				
Not appl					
	ON 4: First aid measures				
4.1.	Description of first aid measures				
	J. J	where	e of accident or if you feel unwell, seek r possible). Move the affected personnel	away from the o	contaminated area.
		respir	we person to fresh air and keep comforta ation. Get medical advice/attention.		
			with plenty of soap and water. Get medi		
irst-aid	,	prese	diately flush eyes thoroughly with water f nt and easy to do. Continue rinsing. Get	medical advice/	attention.
First-aid	measures after ingestion :		DT induce vomiting. Never give anything out with water. Get medical advice/atter		unconscious person. Rinse
4.2.	Most important symptoms and effects	, both a	acute and delayed		
Symptor	ns/injuries :		nost important known symptoms and effe nd/or in section 11.	cts are describe	ed in the labelling (see section
4.3.	Indication of any immediate medical a	ttentio	n and special treatment needed		
Treat sy	mptomatically.				
SECTI	ON 5: Firefighting measures				
5.1.	Extinguishing media				
Suitable	extinguishing media :		ol resistant foam. Carbon dioxide. Dry po priate for surrounding fire.	owder. Water sp	ray. Use extinguishing media
5.2.	Special hazards arising from the subs	tance o	or mixture		
-ire haz	ard :	Thern	nal decomposition generates: Carbon ox	des.	
5.3.	Advice for firefighters				
Protectio	on during firefighting :		t attempt to take action without suitable o section 8: "Exposure controls/personal		ment. For further information
SECTI	ON 6: Accidental release measu				
6.1.	Personal precautions, protective equi				
General	measures :		iate unnecessary personnel. Ensure ade ne dust.	quate air ventila	ation. Avoid raising dust. Do not
6.1.1.	For non-emergency personnel				
Emerger	ncy procedures :	Only	qualified personnel equipped with suitable	e protective equ	ipment may intervene.
6.1.2.	For emergency responders				
Protectiv			t attempt to take action without suitable p o section 8: "Exposure controls/personal		ment. For further information
6.2.	Environmental precautions				
	lease to the environment. Notify authorities	if prod	uct enters sewers or public waters		

5-Carboxyphthalide

6.3. Methods and material for containn	nent and cleaning up
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Do not breathe dust. Avoid raising dust. Wear
recoulding for sale handling	personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includ	Jing any incompatibilities
Storage conditions	: Keep container tightly closed.
Incompatible materials	: Refer to Section 10 on Incompatible Materials.
Storage area	: Store in dry, cool, well-ventilated area.
SECTION 8: Exposure controls/per	sonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Protective gloves.
Eye protection	: Chemical goggles or safety glasses. Face shield.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and	
Physical state	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
•••	: No data available
Flash point Relative eveneration rate (butul acetate=1)	
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available : No data available
Explosion limits	
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Molecular mass	: 178.14 g/mol
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	· No data available

Viscosity

12/08/2016

: No data available

EN (English US)

5-Carboxyphthalide Safety Data Sheet

exposure) Aspiration hazard

58 / Monday, March 26, 2012 / Rules and Regulation 77 14

ccording to Federal Register / Vol. 77, No. 58 / Monday	, March 26, 2012 / Rules and Regulations		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity			
10.1. Reactivity			
No additional information available			
10.2. Chemical stability			
The product is stable at normal handling and sto	prage conditions.		
10.3. Possibility of hazardous reactions			
No additional information available			
10.4. Conditions to avoid			
No additional information available			
10.5. Incompatible materials			
Strong bases. Strong oxidizing agents.			
10.6. Hazardous decomposition products	3		
Under normal conditions of storage and use, ha	zardous decomposition products should not be produced. Hazardous decomposition products in case o		
SECTION 11: Toxicological information	tion		
11.1. Information on toxicological effects	3		
Acute toxicity	: Not classified		
Skin corrosion/irritation	: Causes skin irritation.		
Serious eye damage/irritation	: Causes serious eye irritation.		
Respiratory or skin sensitization : Not classified			
Germ cell mutagenicity : Not classified			
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single exposure)	· May cause respiratory irritation		

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated : Not classified

: Not classified

SECT 12.1.	TON 12: Ecological information
	litional information available
12.2.	Persistence and degradability
No add	litional information available
12.3.	Bioaccumulative potential
No add	litional information available
12.4.	Mobility in soil
No add	litional information available
12.5.	Other adverse effects
No add	litional information available
SECT	-ION 13: Disposal considerations

SECTION 13: Disposal considerations				
13.1.	Waste treatment methods			
Waste tre	eatment methods	: Remove to an authorized	ncinerator equipped with an afterburner and a flue g	as scrubber.
12/08/201	6	EN (English US)	SDS ID: 2H25127	4/6

5-Carboxyphthalide

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Waste disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

5-Carboxyphthali	de
------------------	----

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS No 4792-29-4

15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

medical attention is given.

: 0 - Materials that will not burn.

and are not reactive with water.

SECTION 16: Other information

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt

: 0 - Normally stable, even under fire exposure conditions,

NFPA health hazard

NFPA fire hazard	
NFPA reactivity	

100%

Λ

5-Carboxyphthalide

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.