

SAFETY DATA SHEET

Creation Date 28-Apr-2014

Revision Date 28-Dec-2021

Revision Number 6

1. Identification

Product Name

4,4'-Dibromo-2,2'-bipyridine, 98%

Cat No. :

AC454900000; AC454900010; AC454900050

CAS No Synonyms 18511-71-2 No information available

Recommended Use Uses advised against

Laboratory chemicals. Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

<u>Company</u>

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component		CAS No	Weight %				
4,4'-Dibromo-2,2'-bipyrid	line	18511-71-2	>95				
	4.	First-aid measures					
General Advice If symptoms persist, call a physician.							
Eye Contact	Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. medical attention.						
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.						
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.						
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.						
Most important symptoms and effects	None reasonably foreseeable.						

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx). Hydrogen bromide.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<u>NFPA</u>	Health	Flammability	Instability	Physical hazards N/A					
	_		-						
		 Accidental re 	lease measures						
Personal	Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.							
Environm	ental Precautions	Should not be released into Information.	o the environment. See Section	n 12 for additional Ecological					
Methods Up	for Containment and (Clean Sweep up and shovel into containers for disposal.	suitable containers for disposa	I. Keep in suitable, closed					
		7. Handling	and storage						
Handling		Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.							
Storage.		Keep containers tightly clo Materials. Strong oxidizing	sed in a dry, cool and well-ven g agents.	tilated place. Incompatible					
	8	Exposure controls	/ personal protecti	on					
Exposure	Guidelines		ain any hazardous materials w gion specific regulatory bodies.						
Engineer	ing Measures		ons and safety showers are clo n, especially in confined areas	se to the workstation location.					
<u>Personal</u>	Protective Equipment	-							

Eye/face Protection	Tight sealing safety goggles.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

	I I I
Physical State	Solid
Appearance	White - Off-white
Odor	No information available
Odor Threshold	No information available
рН	No information available
Melting Point/Range	140 - 143 °C / 284 - 289.4 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C10 H6 Br2 N2
Molecular Weight	313.98

10. Stability and reactivity

Reactive Hazard	None known, based on information available				
Stability	Stable under normal conditions.				
Conditions to Avoid	Incompatible products. Excess heat. Avoid dust formation.				
Incompatible Materials	Strong oxidizing agents				
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen bromide					
Hazardous Polymerization	Hazardous polymerization does not occur.				
Hazardous Reactions	None under normal processing.				

11. Toxicological information

Acute Toxicity

Product Information Component Information Toxicologically Synergistic Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	No information available
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico				
4,4'-Dibromo-2,2'-bipyr idine	18511-71-2	Not listed	Not listed	Not listed	Not listed	Not listed				
Mutagenic Effects	I	No information available								
Reproductive Effect	ts	No information available.								
Developmental Effe	cts	No information available.								
Teratogenicity		No information ava	ailable.							
STOT - single exposision STOT - repeated ex		Respiratory syster None known	n							
Aspiration hazard		No information ava	ailable							
Symptoms / effects delayed	/ effects,both acute and No information available									
Endocrine Disrupto	r Information	No information ava	ailable							
Other Adverse Effe	cts	The toxicological properties have not been fully investigated.								
		12. Ecol	ogical infor	mation						
Ecotoxicity Do not empty into dra	ains.									
Persistence and De	gradability	No information available								
Bioaccumulation/ A	ccumulation	No information available.								
Mobility No information available.										
			sal conside							
Waste Disposal Me	thods	hazardous waste.	Chemical waste g	ermine whether a lenerators must als s to ensure comple	o consult local, reg	gional, and				
		14. Trar	nsport inform	mation						

	14. Transport Information
DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
	15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
4,4'-Dibromo-2,2'-bipyridine	18511-71-2	-	-	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
4,4'-Dibromo-2,2'-bipyridine	18511-71-2	-	-	-	-	-		-	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations	
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SARA 313	Not applicable		
SARA 311/312 Hazard Categories	See section 2 for more information		
CWA (Clean Water Act)	Not applicable		
Clean Air Act	Not applicable		
OSHA - Occupational Safety and Health Administration	Not applicable		
CERCLA	Not applicable		
California Proposition CE	This product does not contain any Draposition CE chamicals		
California Proposition 65	This product does not contain any Proposition 65 chemicals.		
U.S. State Right-to-Know Regulations	Not applicable		
U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N		
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.		
Other International Regulations			
Mexico - Grade	No information available		
Authorisation/Restrictions according to EU REACH			

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
4,4'-Dibromo-2,2'-bipyridine	18511-71-2	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
4,4'-Dibromo-2,2'-bipyridine	18511-71-2	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information		
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com	
Creation Date Revision Date Print Date Revision Summary	28-Apr-2014 28-Dec-2021 28-Dec-2021 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).	

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text

End of SDS