

SAFETY DATA SHEET

Revision Date 23-Jan-2018

Revision Number 4

	1. Identification
Product Name	1,4-Dibromobenzene
Cat No. :	AC112730000; AC112730010; AC112730025; AC112730050; AC112732500
CAS-No Synonyms	106-37-6 p-Dibromobenzene; Benzene, 1,4-dibromo-; p-Bromobenzene bromide
Recommended Use Uses advised against	Laboratory chemicals. Not for food, drug, pesticide or biocidal product use
Details of the supplier of the	safety data sheet
Company	

<u>Company</u> Fisher Scientific 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)	Category 2 Category 2 Category 3
Target Organs - Respiratory system.	
	Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure)

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

Eves

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)

Toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients CAS-No Weight % Component p-Dibromobenzene 106-37-6 99 4. First-aid measures Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. Skin Contact Obtain medical attention. Wash off immediately with plenty of water for at least 15 minutes. Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if Inhalation symptoms occur. Do not induce vomiting. Obtain medical attention. Ingestion Most important symptoms and Irritating to eyes. effects Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media

Water spray, Carbon dioxide (CO₂), Dry chemical, Chemical foam,

Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available

Autoignition Temperature

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. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO2) Hydrogen halides

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
2	0	0	N/A
	6. Accidental rel		
Personal Precautions	Ensure adequate ventilation eyes and clothing. Avoid du	n. Use personal protective equipr	ment. Avoid contact with skin,
Environmental Precautions		ater or sanitary sewer system.	
Methods for Containment and Clea Up		billage and collect in suitable cont ironment. Avoid dust formation.	ainer for disposal. Do not let
	7. Handling a	and storage	
Handling		l eyes. Do not breathe dust. Do n protective equipment. Avoid dust	
Storage	Keep in a dry, cool and wel nitrogen.	II-ventilated place. Keep containe	r tightly closed. Keep under
8. E	xposure controls /	/ personal protectior	า
Exposure Guidelines		ain any hazardous materials with ion specific regulatory bodies.	occupational exposure
Engineering Measures		n, especially in confined areas. E se to the workstation location.	nsure that eyewash stations
Personal Protective Equipment			
Eye/face Protection		e eyeglasses or chemical safety o ection regulations in 29 CFR 1910	
Skin and body protection	Wear appropriate protective	e gloves and clothing to prevent s	skin exposure.

EN 149. exposure Hygiene Measures Handle in 9. Physical State Appearance Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	ne OSHA respirator regulations found in 29 CFR 1910.134 or European Standard Use a NIOSH/MSHA or European Standard EN 149 approved respirator if a limits are exceeded or if irritation or other symptoms are experienced. In accordance with good industrial hygiene and safety practice.
9. Physi Physical State Appearance Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	ical and chemical properties Solid
Physical State Appearance Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	Solid
Appearance Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	
Odor Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	
Odor Threshold pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	Off-white
pH Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No information available
Melting Point/Range Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No information available
Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No information available
Flash Point Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	86 - 89 °C / 186.8 - 192.2 °F
Evaporation Rate Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	219 °C / 426.2 °F @ 760 mmHg
Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No information available
Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	Not applicable
Upper Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No information available
Lower Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	
Vapor Pressure Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No data available
Vapor Density Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	No data available
Specific Gravity Solubility Partition coefficient; n-octanol/water Autoignition Temperature	33 hPa @ 61 °C
Solubility Partition coefficient; n-octanol/water Autoignition Temperature	Not applicable
Partition coefficient; n-octanol/water Autoignition Temperature	1.840
Autoignition Temperature	insoluble
	No data available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C6 H4 Br2
Molecular Weight	235.91
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Reactive Hazard	None known, based on information available	
Stability	Stable under normal conditions.	
Conditions to Avoid	Incompatible products.	
Incompatible Materials	Strong oxidizing agents	
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides		
Hazardous Polymerization	No information available.	
Hazardous Reactions	None under normal processing.	

11. Toxicological information

Acute Toxicity

Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as v	No acute toxicity information is available for this product No information available vell as chronic effects from short and long-term exposure
Irritation	Irritating to eyes, respiratory system and skin
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
p-Dibromobenzene	106-37-6	Not listed	Not listed	Not listed	Not listed	Not listed
Mutagenic Effects		No information ava	ailable			
Reproductive Effect	S	No information ava	ailable.			
Developmental Effe	cts	No information ava	ailable.			
Teratogenicity		No information ava	ailable.			
STOT - single expos STOT - repeated exp		Respiratory system None known	n			
Aspiration hazard		No information ava	ailable			
Symptoms / effects delayed	,both acute and	No information ava	ailable			
Endocrine Disrupto	r Information	No information ava	ailable			
Other Adverse Effect	cts	The toxicological p complete informati		been fully investig	gated. See actual e	entry in RTECS fo

12. Ecological information

Ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
p-Dibromobenzene	Not listed	Not listed	EC50 = 2.84 mg/L 30 min	Not listed
Persistence and Degrada	ability Insoluble in v	water May persist based	on information available.	
Bioaccumulation/ AccumulationNo informatiMobilityIs not likely it			t due its low water solubility.	
	13. Di	sposal conside	rations	
Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is cl hazardous waste. Chemical waste generators must also consult local, regional national hazardous waste regulations to ensure complete and accurate classified		al, regional, and		

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14	Transport	information
	Transport	mornation

DOT	
UN-No	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
Proper technical name	p-Dibromobenzene
Hazard Class	9
Packing Group	
TDG	
UN-No	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
Hazard Class	9
Packing Group	III
IATA	
UN-No	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
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Hazard Class	9
Packing Group	III
IMDG/IMO	
UN-No	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Hazard Class	9
Packing Group	
	15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
p-Dibromobenzene	Х	Х	-	203-390-2	-		Х	Х	Х	Х	Х

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)	Not applicable
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 Not applicable	Administration
CERCLA	Not applicable
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

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available				
	16. Other information				
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com				
Revision Date Print Date Revision Summary	23-Jan-2018 23-Jan-2018 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