

MATERIAL SAFETY DATA SHEET (MSDS)

SECTIO	DN 1 :	Identif	ication
		- a c - i u	- Catlori

1.1	Product identifiers						
	Product Name :	1,4-Dibromobenzene					
	Cat No.:	AC161280000; AC161280010; AC161280050; AC161281000; AC161285000					
	CAS No. :	110-52-1					
1.2	Relevant identified uses of th	e substance or mixture and uses advised against					
	Recommended uses :	Laboratory chemicals					
	Uses advised against:	Food, drug, pesticide or biocidal product use.					
1.3	3 Details of the supplier of the safety data sheet						
	Company :	Krishna Solvechem Limited. B/503, Shayog, S. V. Road, Kandivali (West), Mumbai – 400067. India.					
	Telephone :	+91-22-6123 0222					
	Email :	exports@kscl.co.in					
1.4	Emergency telephone numbe	r					
	Emergency Phone :	+91-8657457330					
-	SECT	ION 2: Hazards identification					
2.1	Classification						
	This chemical is considered ha (29 CFR 1910.1200)	azardous by the 2012 OSHA Hazard Communication Standard					
	Acute oral toxicity	(Category 3)					
	Skin Corrosion/Irritation	(Category 2)					
	Serious Eye Damage/Eye Irrit						
	Specific target organ toxicity						
	Target Organs - Respiratory s	ystem.					
2.2	Label elements						
	Pictogram :						
	Signal word	Danger					
	Hazard statement (s)	May cause respiratory irritation					



Causes skin irritation Causes serious eye irritation Harmful if swallowed Precautionary statement (s) 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 Do not eat, drink or smoke when using this product IF ON SKIN (or hair): If skin irritation occurs: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing 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 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. Storage: Store locked up Store in a well-ventilated place. Keep container tightly closed Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if youfeel unwell. Rinse mouth.



Disposal:

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified.

SECTION 3: Composition / information on ingredients

3.1

	Component	CAS-No	Weight %				
Butane,1,4-dibromo-		110-52-1	<=95%				
SECTION 4: First aid measures							
4.1 Description of first aid measures							
If inhalation : Remove from exposure, lie down. Remove to fresh air. If not							
		breathing, give artificial respirati					

4 2	Most important suppressions	Courses ave hurns. Courses sovere ave demage
	Ingestion :	Clean mouth with water. Get medical attention.
	In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
	In case of skin contact :	Wash off immediately with plenty of water while removing all contaminated clothes and shoes. Get medical attention.

4.2 Most important symptoms Causes eye burns. Causes severe eye damage.

and effects : 4.3 Notes to Physician :

Treat symptomatically

SECTION 5: Firefighting measures

5.1	Extinguishing media	
	Suitable extinguishing media	Water spray, carbon dioxide (CO2), dry chemical, chemical foam.
	Unsuitable Extinguishing Media	No information available
5.2	Flash Point : Method :	112 °C / 233.6 °F No information available



	Autoignition Temperature: Explosion Limits:	No information available							
	Upper	No data available							
	Lower	No data availa	ble						
	Sensitivity to Mechanical Impact	No informatio	n available						
	Sensitivity to Static Discharge	No information available							
	Specific Hazards Arising from the Chemical	n Keep product and empty container away from heat and sources of ignition.							
	Hazardous Combustion Products :	Carbon monox	de (CO). Carbon d	ioxide (CO2). Hי	ydrogen bromid				
5.4		As in any fire,	wear self-containe and, MSHA/NIOSF	ed breathing ap	paratus				
5.4	Products : Protective Equipment and	As in any fire, pressure-dem	wear self-containe and, MSHA/NIOSF	ed breathing ap	paratus				

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

6.2 Environmental precautions

See section 12 for additional Ecological information

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (eg sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable closed containers for disposal. Do not let this chemical enter the environment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling



		nd eyes. Do not breathe mist/vapors/spray. Do not ingest. If nediate medical assistance.					
7.2	Conditions for safe stora	ge					
	• •	ell-ventilated place. Keep container tightly closed. Refer product luct labelfor specific storage temperature requirement.					
	SECTION	8: Exposure controls/personal protection					
8.1	Exposure Guidelines						
0.1	This product does not co	ntain any hazardous materials with occupational exposure region specific regulatory bodies.					
	Ensure that eyewash stat	ions and safety showers are close to the workstation location. ion, especially in confined areas.					
8.2	Exposure controls						
	OSHA's eye and fact EN166. Skin protection and Wear appropriate p Respiratory protect No protective equip Hygiene Measures	on protective eyeglasses or chemical safety goggles as described by e protection regulations in 29 CFR 1910.133 or European Standard d body protection rotective gloves and clothing to prevent skin exposure.					
	SECTI	ON 9: Physical and chemical properties					
9.1	Information on basic phy	vsical and chemical properties					
	a) Appearance	Form: liquid, light yellow					
	b) Odour	No data available					
	c) Odour Threshold No information available						
	d) pH No information available						



f) initial boiling point and boiling range	197 °C / 386.6 °F @ 760 mmHg				
g) Flash point	112 °C / 233.6 °F				
h) Evaporation rate	No information available				
i) Flammability (solid, gas)	Not applicable				
j) Upper/lower flammability or explosive limits	No data available No data available				
k) Vapour pressure	No data available				
l) Vapour density	Not applicable				
m) Specific Gravity	1.808				
n) Solubility	No data available				
o) Partition coefficient: n octanol/water	No data available				
p) Auto-ignition temperature	Not applicable				
q) Decomposition temperature	No data available				
r) Viscosity	No information available				
s) Molecular formula	C4H8Br2				
t) Molecular Weight	215.92				

	SECTION 10: Stability and Reactivity							
10.1	Reactive Hazard :	None known, based on information available						
10.2	Chemical stability :	Stable under normal conditions.						
10.3	Possibility of hazardous reactions :	None under normal processing.						
10.4	Conditions to avoid : Excess heat. Exposure to light. Incompatible products. Exposur To moist air or water.							
10.5	10.5 Incompatible materials: Strong oxidizing agents, strong bases, strong acids							
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen bromide						



SECTION 11: Toxicological information

11.1								
Information on toxico	ogical effe	cts						
Acute toxicity:				_				
Product Information:				e toxicity inform	nation is avail	able for this		
C	product							
Component Information Toxicologically Synerg	No info	rmation availab	ام					
					-			
Delayed and im	<u>nediate er</u>	rects as well	as chronic e	effects from sho	ort and long-t	term exposure		
Irritation :	No info	rmation availab	le					
Sensitization:	Sensitization:				le			
Carcinogenicity	Carcinogenicity :				es whether e	ach agency		
			nasany	ingredient as a	carcinogen.			
Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico		
Butane,1,4-	110-52-	Not listed	Not	Not listed	Not listed	Not listed		
dibromo-	1		listed					
Mutagenic Effec	ts:		No information available.					
Reproductive Ef	fects:		No information available.					
Developmental	Effects :		No information available.					
Teratogenicity:			No information available.					
STOT - single exp	oosure :		Respiratory system					
STOT - repeated	exposure:		None known					
Aspiration hazar	d:		No information available.					
Symptoms / eff	ects,both a	acute and	No data available					
delayed								
Fade aria e Diama			N.a. :					
Endocrine Disru	otor inforn	nation :	NO INFORM	ation available				
Other Adverse E	ffects :		The toxico investigate	logical properti ed.	ies have not k	been fully		



		SECTION 12	2: Ecological inf	ormation					
12.1									
Ecoto	oxicity:	Do	Do not empty into drains.						
12.2	Persistence and deg	radability: Per	sistence is unlikel	у					
	Bioaccumulation/ Accumulation	No	information avail	able					
12.3	Mobility:	will	likely to be mobi	le in the environment	t due to its water				
			<i>·</i> ·	: : butane,1,4-dibrom	0-				
			pow: 2.621						
		SECTION 13	: Disposal cons	iderations					
				vaste generators mus ensure complete and					
		SECTION 14	I: Transport inf	ormation					
14.1	UN number :								
	TDG :	UN2810							
	IMDG :	UN2810							
	IATA :	UN2810							
	DOT :	UN2810							
	UN proper shipping I								
	TDG :	-	organic, n.o.s.						
	IMDG :	•	organic, n.o.s.						
	IATA :	• •	organic, n.o.s.						
11 2	DOT :		DS, ORGANIC, N. (L IMDG : 6.1						
14.3	•				DOT : 6.1				
14.4	Packaging group:	TDG :	IMDG :	IATA : III DOT	: 111				
			: Regulatory in	formation					
15.1	United states of Ame	erica Inventory:							
	Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags				
	Butane,1,4- dibromo-	110-52-1	X	ACTIVE	-				



Legend :

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), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Butane,1,4-dibromo-	110-52-1	-	Х	203-775- 5	Х	Х	-	Х	Х	-

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
SANA 511/512 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 65	This product does not contain any Proposition 65 chemicals.
2 U.S. State Right-to-Know Regulation	ons: Not applicable
U.S. Department of TransportationReportable Quantity (RQ):NDOT Marine PollutantNDOT Severe Marine PollutantN	1



U.S. Department of Homeland - This product does not contain the any DHS Chemicals. **Security**

Other International Regulations

 Mexico – Grade
 No information available

 Authorisation/Restrictions according to EU REACH

Safety, health and environmen	tal regulations/legis	slation specific for the s	substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Butane,1,4-dibromo-	110-52-1	Not applicable	Not applicable	Not applicable	Not applicable

Seveso III Directive(2012/18/EC) -Qualifying Quantities for Major Accident Notification Not applicable Seveso III Directive(2012/18/EC) -Qualifying Quantities for Safety Report Requirements Not applicable

Rotterdam Convention (PIC) Not applicable Basel convention (Hazardous Waste) Annex I – Y45

SECTION 16: Other information

16.1	Prepared By:	Regulatory affairs
		Krishna Solvechem Ltd
	Email:	exports@kscl.co.in
	Revision Date:	24-Dec-2021
	Print Date:	24-Dec-2021
	Revision Summary:	This document has been updated to comply with the US OSHA
		HazCom 2012 Standard replacing the current legislation
		under 29 C FR 1910.1200 to align with the Globally
		Harmonized System of Classification and Labeling of Chemicals
		(GHS).
16 2	Disclaimor:	

16.2 Disclaimer:

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