

MATERIAL SAFETY DATA SHEET (MSDS)

	SECTION 1: Identification							
1.1	Product identifiers							
	Product Name :	4-Bromo-1,2-dichlorobenzene						
	Cat No.:	A10314						
	CAS No. :	18282-59-2						
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	Details of the supplier of the safety data sheet							
	Company :	Krishna Solvechem Limited.						
		B/503, Sahayog, 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						

SECTION 2: Hazards identification

2.1 Classification

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

Acute oral toxicity	(Category 4)
Skin Corrosion/Irritation	(Category 2)
Serious Eye Damage/Eye Irritation	(Category 2)
Skin sensitization	(Category 1)

2.2 Label elements

Pictogram :



Signal wordWarningHazard statement (s)Harmful if swallowed



	Causes skin irritation
	Causes serious eye irritation
	May cause an allergic skin reaction
Precautionary statement (s)	
Prevention	
	Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye
	protection/face protection
	Do not eat, drink or smoke when using this product Contaminated work clothing should not be allowed out of the workplace.
	Avoid breathing dust/fume/gas/mist/vapors/spray
	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
	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
	Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel 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 %					
Be	nzene,4-bromo-1,2-dichloro-	18282-59-2	<100					
	SE	CTION 4: First aid measures						
4.1	Description of first aid measu	ires						
	If inhalation :	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.						
	In case of skin contact :	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.						
	In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.						
	Ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drinkplenty of water. If possible drink milk afterwards.							
4.2	Most important symptoms	May cause allergic skin reaction.	Symptoms of allergic reaction					
	and effects :	may include rash, itching, swelli	ng, trouble breathing, tingling					
		of the hands and feet, dizziness,	lightheadedness, chest pain,					
		muscle pain or flushing						
4.3	Notes to Physician :	Treat symptomatically						
	SE	CTION 5: Firefighting effects						
5.1	Extinguishing media							
	Suitable extinguishing media	Water spray, carbon dioxide (CO2	2). drv chemical. alcohol-					

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	Suitable extinguishing media :	Water spray, carbon dioxide (CO2), dry chemical, alcohol- resistant foam.					
	Unsuitable Extinguishing Media: :	No information available					
5.2	Flash Point : Method :	No information available No information available					



	Autoignition Temperature: Explosion Limits:	No information available							
	Upper	No data available							
	Lower	No data availa	ble						
	Sensitivity to Mechanical Impact	No information available							
	Sensitivity to Static Discharge	No information available							
	Specific Hazards Arising from the Chemical :	m Keep product and empty container away from heat and sour of ignition.							
	Hazardous Combustion Products :	Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen halide Hydrogen chloride gas.							
5.4	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.							
	NFPA:	Health	Flammability	Instability	Physical hazards				
		2	1	0	N/A				

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

Do not flush into surface water or sanitary sewer system

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material(e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe dust.



Keep container tightly closed	in adry and well-ventilated place.							
	Keep container tightly closed in adry and well-ventilated place.							
SECTION 8: E	xposure controls/personal protection							
Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.								
Engineering Measures Ensure that eyewash stationsa Ensure adequate ventilation, o	and safety showers are close to the workstation location. especially in confined areas.							
Exposure controls								
Fersional protective equipment - Eye / Face protection Wear appropriate protective eyeglasses or chemical safety goggles as described OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Sta EN166. Skin protection and body protection Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory protection No protective equipment is needed under normal use conditions Hygiene Measures Handle in accordance with good industrial hygiene and safety practice								
SECTION 9: Physical and chemical properties								
· ·								
•	Odorless							
-	No information available							
 d) pH e) Melting point / freezing point 	No information available 23 - 24 °C / 73.4 - 75.2 °F							
f) Initial boiling point and	124 °C 33mm Hg (lit.)							
	limits established by the region Engineering Measures Ensure that eyewash stationsate Ensure adequate ventilation, of Exposure controls Personal protective equipment Eye / Face protection Wear appropriate protection Wear appropriate protection No protective equipment Hygiene Measures Handle in accordance with SECTION S Information on basic physical a) Appearance b) Odour c) Odour Threshold d) pH e) Melting point / freezing point							



boiling range	
g) Flash point	No information available
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower	No data available
flammability or	No data available
explosive limits	
k) Vapour pressure	0.6-25 Pa at 20-50 °C
l) Vapour density	1.761 g/ml at 25 °C(lit)
m) Specific Gravity	Not applicable
n) Solubility	No information available
o) Partition coefficient: n	No data available
octanol/water	
p) Auto-ignition	No information available
temperature	
q) Decomposition	No information available
temperature	
r) Viscosity	Not applicable
s) Molecular formula	C6 H3 Br Cl2
t) Molecular Weight	225.91

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 :	Incompatible products.
10.5	Incompatible materials:	Strong oxidizing agents
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides, Hydrogen chloride gas
10.7	Hazardous Polymerization	No information available



SECTION 11: Toxicological information	

11.1	11.1								
	Information on toxicological effects								
	<u>e toxicity:</u>								
	uct Information:			No acute	e toxicity inform	nation is avail	able for this		
produ									
	oonent Informatic ologically Synergi		cts	Noinfo	rmation availab	ام			
TUNIC									
	Delayed and imn	<u>nediate er</u>	rects as well	as chronic e	effects from snc	ort and long-	<u>term exposure</u>		
	Irritation :			No infor	mation availab	le			
	Sensitization:			No infor	mation availab	le			
	Carcinogenicity :				e below indicat redient as a car		each agency ha		
	Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico		
	Benzene,4-	18282-	Not listed	Not	Not listed	Not listed	Not listed		
	bromo-1,2- dichloro-	59-2		listed					
	Mutagenic Effects:				No information available.				
	Reproductive Eff	ects:		No information available.					
	Developmental E	ffects :		No information available.					
	Teratogenicity:			No information available.					
	STOT - single exp	osure :		None known					
	STOT - repeated	exposure:		None known					
	Aspiration hazar	d :		No information available.					
	Symptoms / effects,both acute and delayed:			Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing					
	Endocrine Disruptor Information :			No inform	No information available				
	Other Adverse Effects :			The toxicological properties have not been fully investigated.					



	SECTION 12: Ecological information						
Тохіс	exicity: to aquatic organisms, may cause	•		•			
	product contains following substance and degradability:	May persi		for the environme	nt.		
12.2							
	Bioaccumulation/ Accumulation	No inform	ation available				
12.3	Mobility:	No inform	ation available	. Log pow : 4.3			
	SECTIO	N 12. Dicn	osal conside	rations			
		•					
13.1	Waste treatment methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.						
	SECTIO	N 14: Trar	nsport inform	nation			
14.1	UN number :						
	DOT : UN3077 TDG : UN	13077					
	TDG : UN3077 IMDG : U	JN3077					
14.2	UN proper shipping name						
	DOT :	ENVIRONME	NTALLY HAZAR	RDOUS SUBSTANCE	, SOLID, N.O.S.		
	TDG :	ENVIRONME	NTALLY HAZAR	RDOUS SUBSTANCE	, SOLID, N.O.S.		
	IATA :	environme	NTALLY HAZAR	RDOUS SUBSTANCE	, SOLID, N.O.S.		
	IMDG :	ENVIRONMI	ENTALLY HAZA	RDOUS SUBSTANCE	, SOLID, N.O.S.		
14.3	Transport hazard class(es)	DOT: 9	TDG: 9	IMDG: 9	IATA: 9		
14.4	Packaging group:	DOT: III	TDG: III	IMDG: III	IATA: III		

SECTION 15: Regulatory information

15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Benzene,4-	18282-	Х	ACTIVE	-
bromo-1,2- dichloro-	59-2			

Legend:



TSCA 12(b	sted) - Notices c	of Expc	ort	Not ap	plicable							
Canada (D	nal Invento SL/NDSL), E ina (IECSC), I	urope		CS/ELINCS/	NLP), Phi	lippines	s (PICCS),	Japan (E	NCS), Au	stralia		
Component	CAS-No I	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL		
Benzene, 4- bromo-1,2- dichloro-	18282 -59-2	-	Х	242-160-6	-	-	Х	-	X	-		
	<u>ral Regulatic</u>	<u>ons</u>										
SARA 313					N	ot applio	cable					
SARA 311,	/312 Hazard	d Categ	gories		Se	ee sectio	on 2 for r	more info	ormation			
CWA (Clea	an Water Ac	ct)			Ν	ot appli	cable					
Clean Air	Clean Air Act				Not applicable							
OSHA - Oc Health Ad	Not applicable											
				Not applicable								
CERCLA	California Proposition 65This product does not contain any Proposition 65chemicals.							5				
California	-											
California chemicals			gulatio	ons:								
California	Right-to-Kno		gulatio	ons:								



	U.S. Depai Security	rtment of Homel	and - T	his produ	ct does not	conta	in the any DHS	Chemicals.		
	•	rnational Regula	<u>itions</u>							
	Mexico – (Grade		No infor	mation ava	ilable				
	Authorizat	tion/Restrictions	accord	ling to EU	REACH					
Com	ponent	CAS No		REACH (1907/2006) - Annex XIV - SubstancesSubject to Authorization		REACH (1907/2006) - Annex XVII - Restrictionson Certain Dangerous Substances		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very HighConcern (SVHC)		
	ene, 4- 10-1,2- oro-	18282-59-2		-		-		-		
		alth and environ	mental	regulatio	ns/legislati	ion sne	ecific for the su	Ibstance or mixture		
Compo	-	CAS No	OECD		Persisten Organic Pollutant	t	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)		
Benzen 4-brom dichlor	10-1,2-	18282-59-2	Not ap	plicable	Not applica	ble	Not applicable	Not applicable		
Component		Di (2) Qu M		o III ive /18/EC) - ying itiesfor Accident cation	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Safety Report Requirements		Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)		
Benzen 4-brom dichlor	10-1,2-	18282-59-2	Not ap	plicable	Not applica		Not applicable	Annex I - Y45		
		S	ECTIO	N 16: Ot	her infor	matic	n			
	.6.1 Prepared By: Regulatory affairs Krishna Solvechem Limited Email: exports@kscl.co.in									
	Revision Date: 5 Print Date: 5 Revision Summary: 7				02-Jan-2012 31-Aug-2022 31-Aug-2022 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					
						-	Labeling of Che	•		



16.2 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 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.