

	MATER	IAL SAFETY DATA SHEET (MSDS)
		SECTION 1: Identification
1.1	Product identifiers	
	Product Name :	1- Bromooctane
	Cat No.:	AC166810000; AC166810025; AC166810050; AC166815000
	CAS No. :	111-83-1
1.2	Relevant identified uses of	the 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 th	e safety data sheet
	Company :	Krishna Solvechem Ltd.
		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 numl	ber
	Emergency Phone :	+91-8657457330
	SEC	CTION 2: Hazards identification
2.1	<b>Classification</b>	
	This chemical is considered (29 CFR 1910.1200)	hazardous by the 2012 OSHA Hazard Communication Standard
	Flammable liquids	(Category 4)
2.2	Label elements Pictogram : Signal word	Warning
	Hazard statement (s)	Combustible liquid



Prevention       Wash face, hands and any exposed skin thoroughly after handling         Wear protective gloves/protective clothing/eye protection/face protection       Keep away from heat/sparks/open flames/hot surfaces Normality smoking         Do not eat, drink or smoke when using this product       Fire         In case of fire: Use CO2, dry chemical, or foam for extinction         Storage:       Store in a well-ventilated place.
Keep cool <b>Disposal:</b> Dispose of contents/container to an approved waste dispo



### **SECTION 3: Composition / information on ingredients**

Component	CAS-No	Weight %
1-Bromooctane	111-83-1	>95

3.1

### SECTION 4: First aid measures

#### 4.1 **Description of first aid measures General Advice:** If symptoms persist, call a physician. 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 : Clean mouth with water and drink afterwards plenty of water. None reasonably foreseeable. Symptoms of overexposure 4.2 Most important symptoms and effects : may be headache, dizziness, tiredness, nausea and vomiting 4.3 Notes to Physician : Treat symptomatically

### **SECTION 5: Firefighting effects**

5.1	Extinguishing media	
	Suitable extinguishing media	Water spray, carbon dioxide (CO2), dry chemical, alcohol- resistant foam. Water mist may be used to cool closed containers.
	Unsuitable Extinguishing Media	No information available
5.2	Flash Point : Method :	78 °C / 172.4 °F No information available



	Autoignition Temperature:	No information	available				
	Explosion Limits: Upper	No data availab					
	Lower	No data availab					
	Sensitivity to Mechanical	No information	-				
	Impact						
	Sensitivity to Static Discharge	No information available					
	Specific Hazards Arising from the Chemical :	Combustible material. Containers may explode when heated. Do not allow run-off from fire-fighting to enter drains or water courses.					
	Hazardous Combustion Products :	Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen halides					
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		
		0	2	0	N/A		
	SECTION	I 6: Accidenta	l release meas	ures			
6.1	Personal precautions, protect	ive equipment a	nd emergency pr	rocedures			
	Ensure adequate ventilation. L sources of ignition. Take preca			=	emove all		
6.2	Environmental precautions						
	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.						
6.3	should be advised if significant	•					
	should be advised if significant Methods and materials for co	spillages cannot	be contained.				
		spillages cannot ntainment and c	be contained. Ieaning up	ert absorbent ma			
	Methods and materials for con Keep in suitable, closed contain all sources of ignition.	spillages cannot ntainment and c ners for disposal	: be contained. : <b>leaning up</b> . Soak up with ine				
7.1	Methods and materials for con Keep in suitable, closed contain all sources of ignition.	spillages cannot ntainment and c ners for disposal	be contained. Ieaning up				
7.1	Methods and materials for con Keep in suitable, closed contain all sources of ignition. SECT Precautions for safe handling	spillages cannot ntainment and c ners for disposal	: be contained. : <b>leaning up</b> . Soak up with ine ng and storage	2	aterial. Remove		
7.1	Methods and materials for con Keep in suitable, closed contain all sources of ignition.	spillages cannot ntainment and c ners for disposal <b>ION 7: Handli</b> pment/face prot	: be contained. :leaning up . Soak up with ine ng and storage tection. Ensure ac	e dequate ventilat	aterial. Remove ion. Do not get		



#### 7.2 Conditions for safe storage

Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Strong bases.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 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 stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

#### 8.2 Exposure controls

#### Personal protective equipment -

#### Eye / Face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard 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**

#### 9.1 Information on basic physical and chemical properties

	• •
a) Appearance	Form: Liquid, dark yellow
b) Odour	odorless
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	-55 °C / -67 °F
f) Initial boiling point and	201 °C / 393.8 °F @ 760 mmHg



boiling range	
g) Flash point	78 °C / 172.4 °F
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	0.34 mmHg @ 25 °C
l) Vapour density	No information available
m) Specific Gravity	1.110
n) Solubility	Insoluble in water
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	No information available
q) Decomposition temperature	No information available
r) Viscosity	No information available
s) Molecular formula	C8 H17 Br
t) Molecular Weight	193.13

## 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 :	Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to light. Incompatible products.
10.5	Incompatible materials:	Strong oxidizing agents, Strong bases
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides
10.7	Hazardous Polymerization	No information available



	SECTION 11: Toxicological information									
<u>Acute</u> Produ	11.1 Information on toxicological effects <u>Acute toxicity:</u> Product Information: Component Information									
Comp		LD50 Ora	al		LD50 D	ermal	LC50 Inha	lation		
-	mooctane		 490 μL/kg (Ra	t)	Not list		Not listed			
	ologically Synergis					rmation availab				
Delayed and immediate effects as well as chronic effects from short and long-term exposure										
	Irritation : Sensitization:					rmation availab rmation availab				
	Carcinogenicity :				The table below indicates whether each agency ha Any ingredient as a carcinogen.					
		CAS-No	IARC		NTP	ACGIH	OSHA	Mexico		
	1-Bromooctane	111-83- 1	Not listed	No liste	-	Not listed	Not listed	Not listed		
	Mutagenic Effects	s:		Nc	inform	ation available.				
	-			No information available. No information available.						
	Reproductive Effe									
	Teratogenicity:				No information available.					
	STOT - single expo	osure :		Nc	ne kno	wn				
	STOT - repeated e	exposure:		Nc	ne kno	wn				
	Aspiration hazard	l:		Nc	inform	ation available.				
	Symptoms / effe delayed:	cts,both a	cute and	•		of overexposu tiredness, naus	-			
	Endocrine Disrupt	tor Inforn	nation :	Nc	inform	ation available				
	Other Adverse Eff	fects :			The toxicological properties have not been fully investigated.					



### **SECTION 12: Ecological information**

### 12.1

### Ecotoxicity:

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

Comp	onent	Freshwater Algae	Freshwa		Microtox	Water Flea
1-Bro	mooctane	Not listed	LC50: : 96h flow-thro (Pimeph promela	ales	Not listed	Not listed
12.2	Persistence a	nd degradability	: Insoluble available		/lay persist based	d on information
	Bioaccumulat Accumulatior	•	No inforr	mation avai	lable	
12.3	Mobility:			ely mobile i v. Log pow: ‹		nt due to its low water
		SECTIO	ON 13: Dis	posal cons	siderations	
		national hazardo			waste generators ensure complete	s must also consult loca e and accurate
			ON 14: Tra	insport in	formation	
14.1	UN number :		ON 14: Tra	insport in	formation	
14.1		SECTI	ON 14: Tra UN3082	insport in	formation	
14.1	UN number :	SECTI 2 TDG:		ansport in	formation	
	UN number : DOT: UN3082	SECTI 2 TDG: 2 IMDO	UN3082	ansport in	formation	
	UN number : DOT: UN3082 IATA: UN3082	SECTI 2 TDG: 2 IMDO	UN3082 5: UN3082		formation dous substances,	, liquid, n.o.s.
	UN number : DOT: UN3082 IATA: UN3082 UN proper shi	SECTI 2 TDG: 2 IMDO	UN3082 5: UN3082 Environme	ntally hazar		• •
	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT :	SECTI 2 TDG: 2 IMDO	UN3082 5: UN3082 Environme Environme	ntally hazar ntally hazar	dous substances,	liquid, n.o.s.
	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT : TDG :	SECTI 2 TDG: 2 IMDO	UN3082 5: UN3082 Environme Environme Environme	ntally hazar ntally hazar ntally hazar	dous substances, dous substances,	liquid, n.o.s. , liquid, n.o.s.
14.2	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT : TDG : IMDG :	SECTI 2 TDG: 2 IMDO pping name	UN3082 5: UN3082 Environme Environme Environme	ntally hazar ntally hazar ntally hazar	dous substances, dous substances, dous substances,	liquid, n.o.s. , liquid, n.o.s.
14.2	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT : TDG : IMDG : IATA :	SECTI 2 TDG: 2 IMDO pping name zard class(es)	UN3082 5: UN3082 Environme Environme Environme Environme	ntally hazar ntally hazar ntally hazar ntally hazar ntally hazar	dous substances, dous substances, dous substances, dous substances,	liquid, n.o.s. , liquid, n.o.s. , liquid, n.o.s.
14.2	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT : TDG : IMDG : IATA : Transport haz	SECTI 2 TDG: 2 IMDO pping name zard class(es)	UN3082 5: UN3082 Environme Environme Environme Environme DOT: 9 DOT: III	ntally hazar ntally hazar ntally hazar ntally hazar TDG: 9 TDG: III	dous substances, dous substances, dous substances, dous substances, IMDG: 9	liquid, n.o.s. , liquid, n.o.s. , liquid, n.o.s. IATA: 9
14.2 14.3 14.4	UN number : DOT: UN3082 IATA: UN3082 UN proper shi DOT : TDG : IMDG : IATA : Transport haz Packaging gro	SECTI 2 TDG: 2 IMDO pping name zard class(es)	UN3082 5: UN3082 Environme Environme Environme DOT: 9 DOT: III ON 15: Reg	ntally hazar ntally hazar ntally hazar ntally hazar TDG: 9 TDG: III	dous substances, dous substances, dous substances, dous substances, IMDG: 9 IMDG: III	liquid, n.o.s. , liquid, n.o.s. , liquid, n.o.s. IATA: 9

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Legend:

Bromooctane

Active/Inactive

ACTIVE

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1- 1	Notices o al Invento /NDSL), El a (IECSC), I CAS-No I 111-83- 1	ories: urop Korea DSL X	e (EINE	CS/ELINCS/I	PICCS X	ilippines ENCS X	X	Japan (E AICS X	NCS), Au	ustralia KECL 03695	
TSCA 12(b) - Internationa Canada (DSL, (AICS), China Component 1 Bromooctane 1 U.S. Federal	Notices o al Invento /NDSL), El a (IECSC), I CAS-No I 111-83- 1	ories: urop Korea DSL X	e (EINE a (ECL).	CS/ELINCS/I EINECS	NLP), Ph PICCS X	ilippines ENCS X	X	AICS	IECSC	KECL	
Canada (DSL, (AICS), China Component 1 1- 1 Bromooctane 1 <u>U.S. Federal</u>	/NDSL), Ei a (IECSC), I CAS-No I 111-83- 1	Uropo Korea DSL	a (ECL).	CS/ELINCS/I EINECS	NLP), Ph PICCS X	ilippines ENCS X	X	AICS	IECSC	KECL	
Canada (DSL, (AICS), China Component 1 1- 1 Bromooctane 1 <u>U.S. Federal</u>	/NDSL), Ei a (IECSC), I CAS-No I 111-83- 1	Uropo Korea DSL	a (ECL).	EINECS	PICCS X	ENCS X	X	AICS	IECSC	KECL	
(AICS), China Component ( 1- 1 Bromooctane 1 U.S. Federal	a (IECSC), I CAS-No I 111-83- 1	Korea DSL X	a (ECL).	EINECS	PICCS X	ENCS X	X	AICS	IECSC	KECL	
Component     Component       1-     1       Bromooctane     1	CAS-No I 111-83- 1	DSL X		EINECS	X	X	X			KE-	
1- 1 Bromooctane 1 <u>U.S. Federal</u>	111-83- 1	X	NDSL -		X	X	X			KE-	
Bromooctane U.S. Federal	1		-	203-912-9				Х	X		
	Regulatic	ons									
	Regulatic	ons									
	Regulatic	<u>ons</u>									
	Regulatio	<u>ons</u>									
SARA 313											
SARA 313						- +					
				Not applicable							
SARA 311/31	12 Hazard	d Cate	egories	See section 2 for more information							
CWA (Clean	Water Ac	ct)		Not applicable Not applicable							
Clean Air Act	t										
<b>OSHA</b> - Occu	upational S	Safet	y and		N	lot appli	cable				
Health Admi	inistration	۱									
CERCLA					Ν	lot appli	cable				
California Pr	roposition	ו 65		This p	oroduct o	does not	contain	any Prop	osition 6	65	
chemicals.											
L5.2 U.S. State Rig	ght-to-Kno	ow R	egulati	ons:							
Not applicabl	le										
U.S. Departn	ment of Tr	ransp	oortatio	on							
Reportable C		-	N								
DOT Marine	Pollutant	;	Ν								
DOT Severe I	Marine Po	olluta	nt N								



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

#### **Other International Regulations**

# Mexico – Grade No information available Authorization/Restrictions according to EU REACH

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

Component 1-Bromooctane	CAS No 111-83-1	OECD HPV Not applicable	Persistent OrganicPollutant Not applicable	Ozone Depletion Potential Not applicable	Restriction of Hazardous Substances (RoHS) Not applicable			
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)			
1-Bromooctane	111-83-1	Not applicable	Not applicable	Not applicable	Annex I - Y45			
SECTION 16: Other information								
16.1 Prepare Email: Creation Revision Print Da Revision	Date: Date:	exports@k 16-Nov-20 24-Dec-20 24-Dec-20 This docum HazCom 20 under 29 C	vechem Ltd <mark>scl.co.in</mark> 10 21	acing the current align with the Glo	legislation bally			
16.2 Disclaim	er:	· · · ·						
informat	ion and belief	ed in this Safety Da at the date of its put ing, use, processing,	olication. The info	ormation 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.