

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name: 3-Bromoaniline

Cat No.: AC177210000; AC177210050; AC177210250; AC177211000

CAS No.: 591-19-5

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 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 number

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)
Acute dermal toxicity	(Category 4)
Acute Inhalation Toxicity – Vapors	(Category 4)
Skin corrosion/Irritation	(Category 2)
Serious Eye Damage/Eye Irritation	(Category 2)
Specific target organ toxicity (single exposure)	(Category 3)
Target Organs - Respiratory system.	

2.2 Label elements

Pictogram:

 \Diamond

Signal word W

Hazard statement (s) Harmful if swallowed, in contact with skin or if inhaled



Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

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

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

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.

Storage:

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



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 %
Benzrnamine, 3-bromo-	591-19-5	98

SECTION 4: First aid measures

4.1 Description of first aid me	easures
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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.

Clean mouth with water. Get medical attention Ingestion:

4.2 Most important symptoms

No information available

and effects:

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, Chemical foam

Unsuitable Extinguishing

Media::

No information available

230 °C / 446 °F Flash Point: 5.2

> No information available Method:



Autoignition Temperature:

No information available

Explosion Limits:

No data available Upper No data available Lower

Sensitivity to Mechanical

Impact

No information available

Sensitivity to Static No information available

Discharge

the Chemical:

Specific Hazards Arising from Combustible material. Flammable. Vapors may form explosive

mixture with air.

Hazardous Combustion

Products:

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

Nitrogen Oxides(NOx)

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	0	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**

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up 6.3

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 mist/vapors/spray



7.2 Conditions for safe storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Keep away from acids. Incompatible Materials. Acids. Acid anhydrides. Acid chlorides. Chloroformates.

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

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European StandardEN 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..

	SECTION 9: Physical and chemical properties				
9.1	9.1 Information on basic physical and chemical properties				
	a) Appearance Form: Yellow-orange Liquid				
	b) Odour	Aromatic			
	c) Odour Threshold No information available				
	d) pH	No information available			
	e) Melting point / freezing point	16.8 °C / 62.2 °F			
	f) Initial boiling point and	251 °C / 483.8 °F			



boiling range	
g) Flash point	230 °C / 446 °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	No information available
I) Vapour density	No information available
m) Specific Gravity	1.580
n) Solubility	No information available
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	C6 H6 Br N
t) Molecular Weight	172.02

	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:	Heat, flames and sparks. Incompatible products.			
10.5	Incompatible materials:	Acids, Acid anhydrides, Acid chlorides, Chloroformates.			
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides. Nitrogen oxides(NOx)			
10.7	Hazardous Polymerization	No information available			



SECTION 11: Toxicological information

11.1

Information on toxicological effects

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 ha

Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benzenamine,	591-19-	Not listed	Not	Not listed	Not listed	Not listed
3-bromo-	5		listed			

Mutagenic Effects:	No information available.
Reproductive Effects:	No information available.
Developmental Effects:	No information available.
Teratogenicity:	No information available.
STOT - single exposure :	Respiratory system
STOT - repeated exposure:	None known
Aspiration hazard :	No information available.
Symptoms / effects,both acute and delayed:	No information available

Endocrine Disruptor Information : No information available

Other Adverse Effects: The toxicological properties have not been fully

investigated.



	SECTION 12: Ecological information				
12.1 Ecoto	exicity:	Do not empty into drains.			
12.2	Persistence and degradability:	Insoluble in water			
	Bioaccumulation/ Accumulation	No information available			
12.3	Mobility:	Is not likely mobile in the environment due its low water solubility.			

SECTION 13: Disposal considerations

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.

SECTION 14: Transport information						
14.1 UN number :	.1 UN number :					
DOT: UN2810 TDG: UN2	810					
IATA: UN2810 IMDG: UN	UN2810 IMDG: UN2810					
14.3 Transport hazard class(es) DOT: 6.1 TDG: 6.1 IMDG: 6.1 IATA: 6.1						
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
Benzenamine,	591-19-	X	ACTIVE	-
3-bromo-	5			

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
Benzenamine, 3-bromo-	591-19- 5	-	Х	209-704-4	Х	Х	Х	Х	Х	KE- 03622

U.S. Federal Regulations

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 65 This product does not contain any

Proposition 65chemicals.

15.2 U.S. State Right-to-Know Regulations:

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant 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

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain DangerousSubstances	REACH Regulation (EC 1907/2006) article 59 - CandidateList of Substances of Very High Concern (SVHC)
Benzenamine, 3-	-	Use restricted. See	-
bromo-		item 75. (see link for	
		restriction details)	

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

			, ,			
Component	CAS No	OECD HPV	Persistent Ozone Organic Depletion Pollutant Potential		Restriction of Hazardous Substances (RoHS)	
Benzenamine, 3-bromo-	591-19-5	Not applicable	Not applicable	Not applicable	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)
Benzenamine, 3-bromo-	591-19-5	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 16: Other information

16.1 Prepared By: Regulatory affairs

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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 Disclaimer:



KSCL

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.