

1.	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING				
1.1	Product identifiers				
	Product name	:	Isobutylamine		
	CAS-No.	:	78-81-9		
1.2	Relevant identified uses of the substance or mixture and uses advised against				
	Identified uses	:	Laboratory chemicals, Manufacture of substances		
2.	HAZARDS IDENTIFICATION				
2.1	Classification of the substance or mixture				
	Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]				
	Flammable liquids (Category 2)				
	Acute toxicity, Oral (Category 3)				
	Skin corrosion (Category 1A)				
	Classification according to EU Directives 67/548/EEC or 1999/45/EC				
	Highly flammable. Harmful if swallowed. Causes severe burns.				
2.2	Label elements				
	Labelling according Regulation (EC) No 1272/2008 [CLP]				
	Pictogram				
	Signal word	Danger			
	Hazard statement(s)				
	H225	Highly flammable liquid and vapour.			
	H301	Toxic if swallowed.			
	H314	Causes severe skin burns and eye damage.			
	Precautionary statement(s)				
	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.			
	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.			
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.			
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
	P310	Immediately call a POISON CENTER or doctor/ physician.			
	Supplemental Hazard Statements	none			
	According to European Directive 67/548/EEC as amended.				
	Hazard symbol(s)				
	R-pharse(s)				
	R11	Highly flammable.			
	R22	Harmful if swallowed.			
	R35	Causes severe burns.			
	S-pharse(s)				
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.			
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.			
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).			
2.3	Other hazards - none				
3.	COMPOSITION/INFORMATION ON INGREDIENTS				
3.1	Substances				
	Synonyms	:	1-Amino-2-methylpropane		
	Formula	:	C4H11N		
	Molecular Weight	:	73,14 g/mol		
	Component		Concentration		
	Isobutylamine				
	CAS-No.	78-81-9	-		
	EC-No.	201-145-4			
4.	FIRST AID MEASURES				
4.1	Description of first aid measures				
	General advice				
	Consult a physician. Show this safety data sheet to the doctor in attendance.				
	If inhaled				
	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.				
	In case of skin contact				
	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.				
	In case of eye contact				
	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.				
	If swallowed				
	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.				
4.2	Most important symptoms and effects, both acute and delayed				
	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea				
4.3	Indication of immediate medical attention and special treatment needed				
	no data available				
5.	FIRE-FIGHTING MEASURES				
5.1	Extinguishing media				
	Suitable extinguishing media				
	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.				
5.2	Special hazards arising from the substance or mixture				
	Carbon oxides, nitrogen oxides (NOx)				
5.3	Precautions for fire-fighters				
	Wear self contained breathing apparatus for fire fighting if necessary.				
5.4	Further information				
	Use water spray to cool unopened containers.				
6.	ACCIDENTAL RELEASE MEASURES				
6.1	Personal precautions, protective equipment and emergency procedures				
	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.				
6.2	Environmental precautions				
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.				
6.3	Methods and materials for containment and cleaning up				
	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).				
6.4	Reference to other sections				
	For disposal see section 13.				
7.	HANDLING AND STORAGE				
7.1	Precautions for safe handling				
	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.				
7.2	Conditions for safe storage, including any incompatibilities				
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.				
7.3	Specific end uses				
	no data available				
8.	EXPOSURE CONTROLS/PERSONAL PROTECTION				
8.1	Control parameters				
	Components with workplace control parameters				
8.2	Exposure controls				
	Appropriate engineering controls				
	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.				
	Personal protective equipment				
	Eye/face protection				
	Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).				
	Skin protection				
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.				
	The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.				
	Body Protection				
	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.				
	Respiratory protection				
	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).				
9.	PHYSICAL AND CHEMICAL PROPERTIES				
9.1	Information on basic physical and chemical properties				
	a) Appearance	Form: clear, liquid Colour: colourless			
	b) Odour	no data available			
	c) Odour Threshold	no data available			
	d) pH	no data available			
	e) Melting/freezing point	Melting point/range: -85 °C - lit.			
	f) Initial boiling point and boiling range	64 - 71 °C - lit.			
	g) Flash point	-9 °C - closed cup			
	h) Evaporation rate	no data available			
	i) Flammability (solid, gas)	no data available			
	j) Upper/lower flammability or explosive limits	no data available			
	k) Vapour pressure	no data available			
	l) Vapour density	no data available			
	m) Relative density	0,736 g/cm3 at 25 °C			
	n) Water solubility	no data available			
	o) Partition coefficient: n-octanol/water	no data available			
	p) Autoignition temperature	no data available			
	q) Decomposition temperature	no data available			
	r) Viscosity	no data available			
	s) Explosive properties	no data available			
9.2	Other safety information				
	no data available				
10.	STABILITY AND REACTIVITY				
10.1	Reactivity				
	no data available				
10.2	Chemical stability				
	no data available				
10.3	Possibility of hazardous reactions				
	no data available				
10.4	Conditions to avoid				
	Heat, flames and sparks. Extremes of temperature and direct sunlight.				
10.5	Incompatible materials				
	Strong oxidizing agents				
10.6	Hazardous decomposition products				
	Other decomposition products - no data available				
11.	TOXICOLOGICAL INFORMATION				
11.1	Information on toxicological effects				
	Acute toxicity				
	LD50 Oral - rat - 224 mg/kg				
	Remarks: BehavioralConvulsions or effect on seizure threshold. BehavioralAtaxia. BehavioralAntipsychotic.				
	Skin corrosion/irritation				
	no data available				
	Serious eye damage/eye irritation				
	no data available				
	Respiratory or skin sensitization				
	no data available				
	Germ cell mutagenicity				
	no data available				
	Carcinogenicity				
	IARC: no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.				
	Reproductive toxicity				
	no data available				
	Specific target organ toxicity - single exposure				
	no data available				
	Specific target organ toxicity - repeated exposure				
	no data available				
	Aspiration hazard				
	no data available				
	Potential health effects				
	Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.			
	Ingestion	Toxic if swallowed. Causes burns.			
	Skin	May be harmful if absorbed through skin. Causes skin burns.			
	Eyes	Causes eye burns.			
	Signs and Symptoms of Exposure				
	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea				
	Additional Information				
	RTECS: NP9900000				
12.	ECOLOGICAL INFORMATION				
12.1	Toxicity				
	no data available				
12.2	Persistence and degradability				
	no data available				
12.3	Bioaccumulative potential				
	no data available				
12.4	Mobility in soil				
	no data available				
12.5	Results of PBT and vPvB assessment				
	no data available				
12.6	Other adverse effects				
	no data available				
13.	DISPOSAL CONSIDERATIONS				
13.1	Waste treatment methods				
	Product				
	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.				
	Contaminated packaging				
	Dispose of as unused product.				
14.	TRANSPORT INFORMATION				
14.1	UN-Number				
	ADR/RID: 1214	IMDG: 1214	IATA: 1214		
14.2	UN proper shipping name				
	ADR/RID: ISOBUTYLAMINE				
	IMDG: ISOBUTYLAMINE				
	IATA: Isobutylamine				
14.3	Transport hazard class(es)				
	ADR/RID: 3 (8)	IMDG: 3 (8)	IATA: 3 (8)		
14.4	Packaging group				
	ADR/RID: II	IMDG: II	IATA: II		
14.5	Environmental hazards				
	ADR/RID: no	IMDG Marine pollutant: no	IATA: no		
14.6	Special precautions for users				
	no data available				
15.	REGULATORY INFORMATION				
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.				
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	no data available				
15.2	Chemical Safety Assessment				
	no data available				
16.	OTHER INFORMATION				
	Further information				
	For R&D use only. Not for drug, household or other uses.				
	WARRANTY:				
	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.				