

Material Safety Data Sheet α,α,'-Azoisobutyronitrile solution

SECTION 1.1 – PRODUCT IDENTIFICATION

Product Name	:	$\alpha, \alpha, '$ -Azoisobutyronitrile solution
Molecular Formula	:	$C_8H_{12}N_4$
Molecular Weight	:	164.21 g/mole
CAS No.	:	78-67-1

SECTION: 1.2 COMPANY IDENTIFICATION

Company Name: Indenta Chemicals (India) Pvt. Ltd.

Address: 117, The Summit Business Bay, Opp Cinemax, Off. Sir M.V. Road, Near WEH Metro Station, Andheri (E), Mumbai 400 093, India Telephone #:+91-22-26849600 Fax #:+91-22-26849060

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	% by Weight			
α,α,'-Azoisobutyronitrile solution	78-67-1	100			
Toxicological Data on Ingredients: No Data Available					
Toxicological Data on Ingredients. N					

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 2), H225 Skin irritation (Category 2), H315 Reproductive toxicity (Category 2), H361d Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 Specific target organ toxicity - repeated exposure (Category 2), Central nervous system, H373 Aspiration hazard (Category 1), H304 Long-term (chronic) aquatic hazard (Category 3), H412 **3.2 Label elements**

Labelling according Regulation (EC) No

Pictogram Signal word



Indenta Chemicals (India) Pvt. Ltd.

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Unit 1: Plot No. 1405, GIDC Sarigam, Dist. Valsad, Gujarat – 396155 Unit 2: Building No. 73, Gala No. 7, Indian Corporation Compound, Village Gundavli, Mankoli Naka, Bhiwandi, Thane - 421302

Hazard statement(s)

H225	Highly flammable liquid and vapour.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H336	May cause drowsiness or dizziness.	
H361d	Suspected of damaging the unborn child.	
H373	May cause damage to organs (Central nervous system) through	
	prolonged or repeated exposure.	
H412	Harmful to aquatic life with long lasting effects.	
Precautionary statement(s)		
P201	Obtain special instructions before use.	
P210	Keep away from heat, hot surfaces, sparks, open flames and	
	other ignition sources. No smoking.	
P273	Avoid release to the environment.	
P301 + P310 + P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do	
	NOT induce vomiting.	
P302 + P352	IF ON SKIN: Wash with plenty of water.	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	
Supplemental Hazard		
Statements	none	

3.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

Consult a physician. Show this material 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

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

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

The most important known symptoms and effects are described in the labelling (see section

3.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: FIRE AND EXPLOSION DATA

5.1 Extinguishing media

Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides(NOx)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, 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

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION7: 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.

For precautions see section 3.2.

7.2 Conditions for safe storage, including any incompatibilities

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. Store in cool place. Recommended storage temperature 2 - 8 °C

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses 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 Regulation (EU) 2016 (425 and the standard EN 274 derived from it

2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, 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 fullface particle respirator type N100 (US) or type P3 (EN 143) 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form:liquid
7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	Color: white
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting	
point/freezing point	No data available
f) Initial boiling point	
and boiling range	No data available
g) Flash point	4,4 °C
h) Evaporation rate	No data available
i) Flammability (solid,gas)	No data available
j) Upper/lower	
flammability or	
explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	0,858 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
t) Oxidizing properties	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Heat, flames and sparks.
10.5 Incompatible materials
Aldehydes, Strong oxidizing agents, Alcohols, Alkali metals, Heptane, Contamination,
Acetone
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions Carbon oxides, Nitrogen
Oxides(NOx)
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute toxicity	
No data available	
Skin corrosion/irritation	
N <mark>o data available</mark>	
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	
Additional Information	
RTECS: Not available	

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 This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Other adverse effects Toxic to aquatic life.

SECTION 13: DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number				
ADR/RID: 1294	IMDG: 1294	IATA: 1294		
14.2 UN proper shipping name				
ADR/RID: TOLUENE, SOLUTION				
IMDG: TOLUENE, SOLUTIO	N			
IATA: Toluene, SOLUTION				
14.3 Transport hazard class(es)				
ADR/RID: 3	IMDG: 3	IATA: 3		
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 user				
No data available				

SECTION 15: OTHER REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the

substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No.

1907/2006.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of Indenta Chemicals (India) Pvt. Ltd. knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any Laws or Regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from Indenta Chemicals (India) Pvt. Ltd. with the clear understanding that all products must be used at the customer's own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. Indenta Chemicals (India) Pvt. Ltd. shall not be held responsible for any damages to property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, Indenta Chemicals (India) Pvt. Ltd. strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the Indenta Chemicals (India) Pvt. Ltd. website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by Indenta Chemicals (India) Pvt. Ltd. as to the fitness for any use. As the ordinary or otherwise use(s) of this product is outside the control of Indenta Chemicals (India) Pvt. Ltd., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of Indenta Chemicals (India) Pvt. Ltd. is limited to the value of the goods and does not include any consequential loss. Indenta Chemicals (India) Pvt. Ltd. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.