

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

N-OCTANE AR (FOR SYNTHESIS)

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : N-OCTANE AR (FOR SYNTHESIS)

Product code : SS0120600500

Identification of the product : Octane
 CAS No: 111-65-9
 EC No :203-892-1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM
 Chaitanya Tower, 2nd Floor, Office # 206,
 Siddharth Nagar, S.V. Road,
 Goregaon (West), Mumbai - 400062,
 Maharashtra, India.
 Contact: +91 22 28725393 / 94 / 95
 Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : F; R11
 Xn; R65
 R67
 Xi; R38
 N; R50-53

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 -
 Warning (CLP : STOT SE 3) H336
 Aspiration hazard - Category 1 - Danger (CLP : Asp. Tox. 1) H304
 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Physical hazards : Flammable liquids - Category 2 - Danger (CLP : Flam. Liq. 2) H225

Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP :
 Aquatic Acute 1) H400
 Hazardous to the aquatic environment - Chronic hazard - Category 1 - Warning (CLP :
 Aquatic Chronic 1) H410

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
2. Hazards identification -DSD (continued)
2.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s)

Symbol(s)

: F : Highly flammable
 Xn : Harmful
 N : Dangerous for the environment

R Phrase(s)

: R11 : Highly flammable.
 R38 : Irritating to skin.
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 : Harmful : may cause lung damage if swallowed.
 R67 : Vapours may cause drowsiness and dizziness.

S Phrase(s)

:
 S16 : Keep away from sources of ignition - No smoking.
 S29 : Do not empty into drains.
 S33 : Take precautionary measures against static discharges.
 S60 : This material and its container must be disposed of as hazardous waste.
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.
 S62 : If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label.

Contains

: Octane

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words

: Danger

Hazard statements

: 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.
 H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statements
• Prevention

: P240: Ground/bond container and receiving equipment.
 P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.
 P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking.
 P280: Wear protective gloves, protective clothing, eye protection, face protection.
 P271: Use only outdoors or in a well-ventilated area.
 P261: Avoid breathing dust, fume, gas, mist, vapours, spray.
 P273: Avoid release to the environment.

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MATERIAL SAFETY DATA SHEET (MSDS)

N-OCTANE AR (FOR SYNTHESIS)

2. Hazards identification -DSD (continued)

- Response** : P233: Keep container tightly closed.
 P264: Wash thoroughly after handling.
 : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
 P302+P352: IF ON SKIN : Wash with plenty of soap and water.
 P332+P313: If skin irritation occurs : Get medical advice.
 P391: Collect spillage.
 P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
 P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.
 P363: Wash contaminated clothing before reuse.
 P370+P378: In case of fire: Use for extinction.
- Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.
 P403+P235: Store in well-ventilated place. Keep cool.
 P405: Store locked up.
- Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Contains** : Octane

2.3. Other hazards

- Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : Octane

EC No :203-892-1
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Octane	: > 99 %	111-65-9	203-892-1	----	----	F; R11 Xn; R65 R67 Xi; R38 N; R50-53 ----- Flam. Liq. 2 _ H225 Asp. Tox 1 _ H304 Skin Irrit. 2 _ H315 STOT SE 3 _ H336 Aquatic Acute 1 _ H400 Aquatic Chronic 1 _ H410

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

- Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
4. First aid measures (continued)

Skin contact	: Get medical advice. If skin irritation occurs : Wash contaminated clothing before reuse. Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.
Eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
Ingestion	: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use	: May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness.
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4.3. Indication of any immediate medical attention and special treatment needed

General information	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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5. Fire-fighting measures
5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
Surrounding fires	: Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Flammable class	: Highly flammable liquid and vapour.
Hazardous combustion products	: Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders	: Equip cleanup crew with proper protection. Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.
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MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
6. Accidental release measures (continued)

Technical measures	: Use special care to avoid static electric charges.
Special precautions	: Remove ignition sources. No naked lights. No smoking.
For non-emergency personnel	: Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions	: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.
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6.3. Methods and material for containment and cleaning up

Clean up methods	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage
7.1. Precautions for safe handling

Handling	: Handle empty containers with care because residual vapours are flammable. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
Technical protective measures	: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.
Special precautions	: No naked lights. No smoking. Avoid breathing dust, fume, gas, mist, vapours, spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage	: Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s)	: None.
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8. Exposure controls/personal protection
8.1. Exposure controls

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
8. Exposure controls/personal protection (continued)

Personal protection	: Avoid all unnecessary exposure.
• Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection.
• Hand protection	: Wear protective gloves.
• Skin protection	: Wear suitable protective clothing.
• Eye protection	: Chemical goggles or safety glasses.
• Others	: When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits	: No data available.
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9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid.
Colour	: Colorless
Odour	: Characteristic.
Odour threshold	: No data available.
pH value	: No data available.
Melting point [°C]	: - 57 °C - lit
Decomposition point [°C]	: No data available.
Critical temperature [°C]	: No data available.
Auto-ignition temperature [°C]	: 220°C
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Flash point [°C]	: 13,0 °C - closed cup
Initial boiling point [°C]	: 125 - 127 °C - lit
Final boiling point [°C]	: No data available.
Evaporation rate	: No data available.
Vapour pressure [20°C]	: 14,7 hPa at 20 °C
Vapour density	: No data available.
Density [g/cm3]	: 0,703 g/cm3 at 25°C
Relative density, liquid (water=1)	: No data available.
Solubility in water	: ca.0,007 g/l at 20 °C
Log Pow octanol / water at 20°C	: No data available.
Viscosity at 40°C [mm2/s]	: No data available.

9.2. Other information

Explosive properties	: No data available.
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MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
9. Physical and chemical properties (continued)

Explosion limits - upper [%]	: Upper explosion limit : 6,5 %(V)
Explosion limits - lower [%]	: Lower explosion limit : 0,96 %(V)
Oxidising properties	: No data available.

10. Stability and reactivity
10.1. Reactivity

Reactivity	: Not established.
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10.2. Chemical stability

Chemical stability	: Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
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10.4. Conditions to avoid

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures. Open flame.
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10.5. Incompatible materials

Materials to avoid	: Strong acids. Strong bases.
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10.6. Hazardous decomposition products

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide. May release flammable gases.
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11. Toxicological information
11.1. Information on toxicological effects
Acute toxicity

• Inhalation	: LC50-inhalation-rat-4h-118.000 mg/m3
• Dermal	: Based on available data, the classification criteria are not met.
• Ingestion	: May be fatal if swallowed and enters airways.

Corrosion

: Based on available data, the classification criteria are not met.

Irritation

: Causes skin irritation.

Sensitization

: Based on available data, the classification criteria are not met.

Mutagenicity

: Based on available data, the classification criteria are not met.

Carcinogenicity

: Based on available data, the classification criteria are not met.

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
11. Toxicological information (continued)

Toxic for reproduction	: Based on available data, the classification criteria are not met.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: May be fatal if swallowed and enters airways.

12. Ecological information
12.1. Toxicity

Toxicity information	: Very toxic to aquatic life with long lasting effects.
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12.2. Persistence - degradability

Persistence - degradability	: May cause long-term adverse effects in the environment.
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12.3. Bioaccumulative potential

Bioaccumulative potential	: Not established.
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12.4. Mobility in soil

Mobility in soil	: Not established.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.
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12.6. Other adverse effects

Environmental precautions	: Avoid release to the environment.
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13. Disposal considerations
13.1. Waste treatment methods

General	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Special precautions	: Handle empty containers with care because residual vapours are flammable. Hazardous waste due to toxicity.

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
14. Transport information
14.1. Land transport (ADR-RID)

Proper shipping name : OCTANES
 UN N° : 1262
 H.I. nr : 33
 ADR - Class : 3
 Labelling - Transport : 3 : Flammable liquid.



ADR - Classification code : F1
 ADR - Group : II
 ADR - Packing instructions : P001 R001
 ADR - Limited Quantity : 1 L
 ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.


14.2. Sea transport (IMDG) [English only]

Proper shipping name : OCTANES
 UN N° : 1262
 IMO-IMDG - Class or division : 3 : Flammable liquid.
 IMO-IMDG - Packing group : II
 IMO-IMDG - Packing instructions : P001
 IMO-IMDG - Limited quantities : 1 L
 IMO-IMDG - Marine pollution : Yes
 EMS-Nr : F-E S-E

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : OCTANES
 UN N° : 1262
 IATA - Class or division : 3 : Flammable liquid.
 IATA - Packing group : II
 IATA - Passenger and Cargo Aircraft : ALLOWED
 - Passenger and Cargo - Packing instruction : 353

MATERIAL SAFETY DATA SHEET (MSDS)
N-OCTANE AR (FOR SYNTHESIS)
14. Transport information (continued)

- Passenger and Cargo - Maximum	: 5 L
Quantity/Packing	
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 364
- Cargo only - Maximum Quantity/	: 60 L
Packing	
IATA - Limited Quantities	: 1 L
ERG-Nr	: 3H

15. Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment	: It has not been carried out.
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16. Other information

Revision	: Revision - See : *
Abbreviations and acronyms	: PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative
Sources of key data used	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
List of relevant R phrases (heading 3)	: R11 : Highly flammable. R38 : Irritating to skin. R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 : Harmful : may cause lung damage if swallowed. R67 : Vapours may cause drowsiness and dizziness.
List of full text of H-statements in section 3	: 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. H400 : Very toxic to aquatic life. H410 : Very toxic to aquatic life with long lasting effects.
Further information	: None.

MATERIAL SAFETY DATA SHEET (MSDS)

N-OCTANE AR (FOR SYNTHESIS)

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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