Material Safety Data Sheet

NITRO BENZENE FOR SYNTHESIS (RXSOL-60-6605-111)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-111
Product Type	NITROBENZENE FOR SYNTHESIS
Revised date	

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Kandla, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat Barka

Phone	+91 22 27815541 / 42
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

Substance / Preparation : Nitrobenzene
CAS No :98-95-3
Substance.

Substance name	Contents	CAS No
Nitrobenzene :	100 %	98-95-3

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

3. Hazards Identification

3.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45
Classification : Carc. Cat. 3; R40
Repr. Cat. 3; R62
T; R23/24/25-R48/23/24
N; R51-53 Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Carcinogenicity - Category 2 - Warning (CLP : Carc. 2) H351
Reproductive toxicity - Fertility - Category 2 - Warning (CLP : Repr. 2) H361
Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP : STOT RE 1) H372
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311
Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 2 (CLP : Aquatic Chronic 2) H411
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic
N : Dangerous for the environment
R Phrase(s) : R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.
R40 : Limited evidence of a carcinogenic effect.
R48/23/24 : Toxic : danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 : Possible risk of impaired fertility.
S Phrase(s) : S1/2 : Keep locked up and out of reach of children.
S28 : After contact with skin, wash immediately with
S36/37 : Wear suitable protective clothing and gloves.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show

the label when possible).
S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms
Signal words : Danger
Hazard statements : H301 : Toxic if swallowed.
H311 : Toxic in contact with skin.
H331 : Toxic if inhaled.
H351 : Suspected of causing cancer.
H361f : Suspected of damaging fertility.
H372 : Causes damage to organs through prolonged or repeated exposure.
H411 : Toxic to aquatic life with long lasting effects.
Precautionary statements
• General : P102: Keep out of reach of children.
P103: Read label before use.
P101: If medical advice is needed, have product container or label at hand.
P201: Obtain special instructions before use.
• Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection.
P271: Use only outdoors or in a well-ventilated area.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
P273: Avoid release to the environment.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
• Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P308+P313: If exposed or concerned : get medical advice.
P391: Collect spillage.
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P314: Get medical advice if you feel unwell.
P361: Remove immediately all contaminated clothing.
• Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed. 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.
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.
3.3. 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.

4. First Aid Measures

4.1. Description of first aid measures
Inhalation : Assure fresh air breathing. Allow the victim to rest. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.
Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.
Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
Ingestion : Specific treatment (see on this label). 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 : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Danger of serious damage to health by prolonged exposure through inhalation. Suspected of damaging fertility. Swallowing a small quantity of this material will result in serious health hazard.
4.3. Indication of any immediate medical attention and special treatment needed
General information : Never give anything by mouth to an unconscious person. If exposed or concerned : get medical advice.

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
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.
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.
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.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

7. Handling and Storage

7.1. Precautions for safe handling
Handling : Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Obtain special instructions before use.
Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.
7.2. Conditions for safe storage, including any incompatibilities
Storage : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.
7.3. Specific end use(s)
Specific end use(s) : None.

8. Exposure controls and personal protection

8.1. Exposure controls
Personal protection : Avoid all unnecessary exposure.
• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
• Hand protection : Wear protective gloves.
• 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.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state at 20 °C : Liquid.
Odour threshold : No data available.
pH value : No data available.
Melting point [°C] : 5 - 6 °C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 482°C
Flammability (solid, gas) : N/A
Flash point [°C] : 88°C
Boiling point [°C] : 210 - 211 °C
Initial boiling point [°C] : 210°C
Final boiling point [°C] : 211 °C
Evaporation rate : N/A
Vapour pressure [20°C] : 0.3 hPa at 20°C
Vapour pressure mm/Hg : N/A
Vapour density : 4,3
Density [g/cm3] : 1,2
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Practically insolubl
Solubility in water : N/A
Log Pow octanol / water at 20°C : No data available.
Solubility : 8 - 8.5 at 1.00000 g
Viscosity at 40°C [mm2/s] : N/A
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : 40%
Explosion limits - lower [%] : 1,80%
Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity
Reactivity : Not established.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Not established.
10.4. Conditions to avoid
Conditions to avoid : Direct sunlight. Extremely high or low temperatures.
10.5. Incompatible materials
Materials to avoid : Strong acids. Strong bases.
10.6. Hazardous decomposition products
Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity
• Inhalation : Toxic if inhaled.
• Dermal : Toxic in contact with skin.
• Ingestion : Toxic if swallowed.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Based on available data, the classification criteria are not met.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Suspected of causing cancer.
Toxic for reproduction : Suspected of damaging fertility.
STOT-single exposure : Based on available data, the classification criteria are not met.
STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity
Toxicity information : Toxic to aquatic life with long lasting effects.
12.2. Persistence - degradability
Persistence - degradability : May cause long-term adverse effects in the environment.
12.3. Bioaccumulative potential
Bioaccumulative potential : Not established.
12.4. Mobility in soil
Mobility in soil : Not established.
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.
12.6. Other adverse effects
Environmental precautions : Avoid release to the environment.

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.

14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : NITROBENZENE
UN N° : 1662
H.I. nr : 60
ADR - Class : 6.1
Labelling - Transport : 6.1 : Toxic substances.
ADR - Classification code : T1
ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 100 ML
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 : NITROBENZENE
UN N° : 1662
IMO-IMDG - Class or division : 6.1 : Toxic substances.
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 100 ml
IMO-IMDG - Marine pollution : Yes
EMS-Nr : F-A S-A
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : NITROBENZENE
UN N° : 1662
IATA - Class or division : 6.1 : Toxic substances.
IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : ALLOWED -
Passenger and Cargo - Packing : 654
instruction -
Passenger and Cargo - Maximum : 5 L
Quantity/Packing
IATA - Cargo only : ALLOWED -
Cargo only - Packing instruction : 662
- Cargo only - Maximum Quantity/ : 60 L
Packing IATA - Limited Quantites : 1 L
ERG-Nr : 6L

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture
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

16. Other information

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
Further information : None.
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