Material Safety Data Sheet

N HEXANE 99% FOR SYNTHESIS (RXSOL-60-6605-078)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-078
Product Type	n-HEXANE 99% 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

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2. Composition / informationon ingredients

2.1. Substances : n-HEXANE FOR SYNTHESIS
CAS-No. : 110-54-3
Substance.
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 according to Regulation (EC) No. 1272/2008 [CLP]
Flammable liquids, H225
Category 2
Skin corrosion/irritation, H315
Category 2
Reproductive toxicity, H361f
Category 2
Specific target organ toxicity — Single exposure, H336
Category 3,
Narcosis Specific target organ toxicity — Repeated exposure, H373
Category 2
Aspiration hazard, H304
Category 1
Hazardous to the aquatic environment — Chronic Hazard, H411
Category 2
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Adverse physicochemical, human health and environmental effects
No additional information available
3.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display
Symbol(s) : N : Dangerous for the environmen
Xi : Irritation.
Xn: Harmful Highly flammable

R Phrase(s) : R11: Highly flammable.
R38: Irritating to skin.
R62: Possible risk of impaired fertility.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R48/20: Harmful : danger of serious damage to health by prolonged exposure in contact

with skin.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrase(s) : S9: keep container in a well ventilated place.
S16: Keep away from source of ignition-No smoking.
S29: Do not empty into drains.
S33: Take precautionary measures against static discharges.
S61: avoid release to the environment . refer to special instruction/safety data sheets.
S62: if swallowed, do not induce vomiting ; seek medical advice immediately and show this container or label.
S36/37 : Wear suitable protective clothing and gloves.
Hazard pictograms

Signal word : 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.
H361f - Suspected of damaging fertility.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 - Avoid release to the environment.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor
P331 - Do NOT induce vomiting.
3.3. Other hazards
No additional information available

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Wash with plenty of water/…. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion : Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects : Suspected of damaging fertility. Causes damage to organs.
Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.
4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.
5.2. Special hazards arising from the substance or mixture
Fire hazard : Highly flammable liquid and vapour.
Explosion hazard : May form flammable/explosive vapour-air mixture.
5.3. Advice for firefighters
Protection during firefighting : Do not attempt to take action without suitable protective equipment.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures : Remove ignition sources. Use special care to avoid static electric

charges. No open flames. No smoking.
6.1.1. For non-emergency personnel
Emergency procedures : Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment : Use personal protective equipment as required.
Emergency procedures : Ventilate area.
6.2. Environmental precautions
Avoid release to the environment.
6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers.
6.4. Reference to other sections
No additional information available

7. Handling and Storage

7.1. Precautions for safe handling
Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including any incompatibilities
Technical measures : Proper grounding procedures to avoid static electricity should be followed.
Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions : Keep in fireproof place. Keep container tightly closed.
Incompatible materials : Heat sources.
7.3. Specific end use(s)
No additional information available

8. Exposure controls and personal protection

8.1. Control parameters
No additional information available
8.2. Exposure controls
Hand protection : Protective gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : -95 °C
Freezing point : No data available
Boiling point : 68 - 70 K
Flash point : -23 °C
Auto-ignition temperature : 225 °C
Decomposition temperature : No data available
Flammability (solid, gas) : Flammable Highly flammable liquid and vapour.
Vapour pressure : 151 mm Hg at 25 deg C
Relative vapour density at 20 °C : 2.97
Relative density : No data available
Density : 0.678 g/cm³
Solubility : Water: Insoluble in water
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : 0.31 mPa·s 20 deg C
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 0.011 - 0.075 vol %

9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
No additional information available
10.2. Chemical stability
Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
Open flame. Direct sunlight. Overheating.
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified
Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging fertility.
STOT-single exposure : May cause drowsiness or dizziness.
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic 0.457 mm^2/s

12. Ecological information

12.1. Toxicity
Ecology - water : Toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability
Persistence and degradability May cause long-term adverse effects in the environment.
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Other adverse effects
No additional information available

13. Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal
Recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Hazardous waste due to toxicity.

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 1208
UN-No. (IMDG) : 1208

UN-No. (IATA) : 1208
UN-No. (ADN) : 1208
UN-No. (RID) : 1208
14.2. UN proper shipping name
Proper Shipping Name (ADR) : HEXANES
Proper Shipping Name (IMDG) : HEXANES
Proper Shipping Name (IATA) : Hexanes
Proper Shipping Name (ADN) : HEXANES
Proper Shipping Name (RID) : HEXANES
Transport document description (ADR) : UN 1208 HEXANES, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1208 HEXANES, 3, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 1208 Hexanes, 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)
ADR- Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3
IMDG- Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
IATA- Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3
ADN- Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3
RID- Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3
14.4. Packing group
Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II
14.5. Environmental hazards
Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available
14.6. Special precautions for user
Overland transport- Classification code (ADR) : F1
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage – Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates :
Tunnel restriction code (ADR) : D/E EAC code : 3YE
Transport by sea- Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : E
Properties and observations (IMDG) : Colourless, volatile liquids with a faint odour. Explosive limits: 1.1% to 7.5% n HEXANE: flashpoint -22°C c.c. boiling point 69°C. NEOHEXANE: flashpoint -48°C c.c. boiling point 50°C. Immiscible with water. Slightly irritating to skin, eyes and mucous membranes.
MFAG-No : 128
Air transport- PCA
Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353

PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 3H
Inland waterway transport- Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1
Rail transport- Classification code (RID) : F1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations
No REACH Annex XVII restrictions
n-HEXANE FOR SYNTHESIS is not on the REACH Candidate List
n-HEXANE FOR SYNTHESIS is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
Reference to AwSV : Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to AwSV; ID No. 124)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Netherlands
SZW-lijst van kankerverwekkende stoffen : n-HEXANE FOR SYNTHESIS is listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET -limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : n-HEXANE FOR SYNTHESIS is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed
Denmark
Class for fire hazard : Class I-1
Store unit : 1 liter
Classification remarks : F+ ; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
15.2. Chemical safety assessment
No additional information available

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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