Material Safety Data Sheet

b-CYCLODEXTRIN (RXSOL-60-6604-028)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-028
Product Type	? - CYCLODEXTRIN
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

3.1 Substances : ? - Cyclodextrin
CAS-No. : 7585-39-9
Substance.
Contains no other components or impurities which will influence the classification of the product.

3. Hazards Identification

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
2.2 Label elements
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
2.3 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.

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

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

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 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting Measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information
No data available

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. For personal protection see section 8.
6.2 Environmental precautions
Do not let product enter drains.
6.3 Methods and materials
for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

8.1 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
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
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Do not let product enter drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties
Odour Threshold : No data available
pH : No data available
Melting point/freezing point
Melting point/range: 290 - 300 °C
Initial boiling point and boiling range : No data available
Flash point : No data available
Evaporation rate : No data available
Flammability (solid, gas) : No data available
Upper/lower flammability or explosive limits : No data available
Vapour pressure : No data available
Vapour density: No data available
Relative density 1.44 g/cm3 at 20 °C
Water solubility 14.3 g/l at 20 °C: - soluble
Partition coefficient: noctanol/ water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : > 250 °C
- Viscosity : No data available
Explosive properties :No data available
Oxidizing properties: No data available
9.2 Other safety information
Bulk density 400 - 700 kg/m3
Burning rate 0.25 mm/s

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
No data available
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

11. Toxicological information

11.1 Information on toxicological effects Acute toxicity
LD50 Oral - Rat - male and female - > 5,000 mg/kg(?-Cyclodextrine)
(OECD Test Guideline 401)
LC50 Inhalation - Rat - male and female - 4 h - >= 4.9 mg/l(?-Cyclodextrine)
(OECD Test Guideline 403)
LD50 Dermal - Rat - male and female - > 2,000 mg/kg(?-Cyclodextrine)
(OECD Test Guideline 402)
Skin corrosion/irritation
Skin -Rabbit (?-Cyclodextrine)
Result: No skin irritation - 24 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit(?-Cyclodextrine)
Result: Mild eye irritation
(OECD Test Guideline 405)
Respiratory or skin sensitisation
Maximisation Test - Guinea pig(?-Cyclodextrine)
Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)
Germ cell mutagenicity
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.(?Cyclodextrine)
Hamster(?-Cyclodextrine)
Lungs
Result: negative
OECD Test Guideline 477(?-Cyclodextrine)
Drosophila melanogaster - male and female
Result: negative
Carcinogenicity
Animal testing did not show any carcinogenic effects.(?-Cyclodextrine)
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
Specific target organ toxicity - single exposure
No data available(?-Cyclodextrine)
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available(?-Cyclodextrine)
Additional Information
Repeated dose toxicity - Rat - male - Oral - No observed adverse effect level - 650 mg/kg(?-Cyclodextrine)
Repeated dose toxicity - Rat - female - Oral - No observed adverse effect level - 860 mg/kg(?- Cyclodextrine)
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(?-Cyclodextrine)

12. Ecological information

12.1 Toxicity
Toxicity to fish static test LC50 - Cyprinus carpio (Carp) - 7,561 mg/l - 96 h(?Cyclodextrine)
(OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates
Immobilization EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h(?Cyclodextrine)
(OECD Test Guideline 202)
Toxicity to algae Growth inhibition IC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h(?-Cyclodextrine)
(OECD Test Guideline 201)
Toxicity to bacteria Cell multiplication inhibition test EC50 - Pseudomonas putida - > 10,000 mg/l - 16 h(?-Cyclodextrine)
12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d(?-Cyclodextrine)
Result: 75 % - Readily biodegradable
(OECD Test Guideline 301F)
Biochemical Oxygen
Demand (BOD)
700 mg/g(?-Cyclodextrine)
Chemical Oxygen
Demand (COD)
1,090 mg/g(?-Cyclodextrine)
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available(?-Cyclodextrine)
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
Additional ecological information No data available

13. Disposal considerations

13.1 Waste treatment methods Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.
Contaminated packaging
Dispose of as unused product.

14. Transport information

14.1 UN number
ADR/RID: - IMDG: - IATA: -
14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -
14.4 Packaging group
ADR/RID: - IMDG: - IATA: -
14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
14.6 Special precautions for user
No data available
ADR - Packing instructions : P001
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 : ACETIC ACID,
UN N° : 2789
IMO-IMDG - Class or division : 8 : Corrosive substance. (3 : Flammable liquid.)
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 1 L
IMO-IMDG - Marine pollution : No
EMS-Nr : F-E S-C
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : ACETIC ACID
UN N° : 2789
IATA - Class or division : 8 : Corrosive substance. (3 : Flammable liquid.)
IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 851
instruction
- Passenger and Cargo - Maximum : 1 L
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 855
- Cargo only - Maximum Quantity/ : 30 L
Packing
IATA - Limited Quantites : 0.5 L
ERG-Nr : 8F

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.2 Chemical safety assessment
For this product a chemical safety assessment was not 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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