Material Safety Data Sheet

DI Tert BUTYL DI CARBONATE (RXSOL-60-6604-493)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-493
Product Type	DI-tert-BUTYLDICARBONATE
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
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Email	mail@rxmarine.com

2. Composition / informationon ingredients

2.1. Substances : DI-tert BUTYLDICARBONATE
CAS-No. : 24424-99-5
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, H226
Category 3
Acute toxicity (inhal.), H330
Category 2
Skin corrosion/irritation, H315
Category 2
Serious eye damage/eye irritation, H319
Category 2
Skin sensitisation, H317
Category 1
Specific target organ H335
toxicity — Single exposure, Category 3,
Respiratory tract irritation 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) : T : Very toxic
Xi : Irritation.
R Phrase(s) : R10: Flammable.
R26: Very toxic by inhalation.
R43: May cause sensitization by skin contact.
R36/38: Irritating to eyes and skin
. S Phrase(s) : S28: After contact with skin, wash immediately with plenty of …(to be specified by manufacturer)
. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37 : Wear suitable protective clothing and gloves.
Hazard pictograms
Signal word : Danger
Hazard statements : H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation. H330 - Fatal if inhaled.
H335 - May cause respiratory irritation.
Precautionary statements : P260 - Do not breathe vapours, spray, dust, fume, gas.
P280 - Wear protective gloves, protective clothing, cold insulating gloves, eye protection
. P284 - Wear respiratory protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
3.3. Other hazards
No additional information available
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4. First Aid Measures

4.1. Description of first aid measures
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 : Take off immediately all contaminated clothing. Wash with plenty of water/…. Get medical advice/attention.
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 : Rinse mouth. Do not induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Causes skin irritation
. Symptoms/effects after eye contact : Causes serious eye irritation. 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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.
5.2. Special hazards arising from the substance or mixture
Fire hazard : Flammable liquid and vapour.
Explosion hazard : May form flammable/explosive vapour-air mixture.
5.3. Advice for firefighters
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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 : Do not breathe vapours. Take precautionary measures against static discharge. Use only non-sparking tools. Keep away from sources of ignition No smoking. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
Hygiene measures : Do not eat, drink or smoke when using this product. 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 container tightly closed. Keep in fireproof place.
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 : [In case of inadequate ventilation] 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 : 23 °C
Freezing point : No data available
Boiling point : 56 - 57 °C
Flash point : 37 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Flammableliquid and vapour.
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0.95 g/cm³
Solubility : No data available
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available
9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
No additional information available
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
Open flame. Heat. Sparks.
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 : Inhalation: Fatal if inhaled.

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

12. Ecological information

12.1. Toxicity
No additional information available
12.2. Persistence and degradability
No additional information available
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessmen
t 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.

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 2929
UN-No. (IMDG) : 2929
UN-No. (IATA) : 2929
UN-No. (ADN) : 2929
UN-No. (RID) : 2929
14.2. UN proper shipping name
Proper Shipping Name (ADR) : TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.
Proper Shipping Name (IMDG) : TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S
. Proper Shipping Name (IATA) : Toxic liquid, flammable, organic, n.o.s.
Proper Shipping Name (ADN) : TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S
. Proper Shipping Name (RID) : TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.
Transport document description (ADR) : UN 2929 TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S., 6.1 (3), I, (C/D)
Transport document description (IMDG) : UN 2929 TOXIC LIQUID, FLAMMABLE , ORGANIC, N.O.S., 6.1 (3), I
Transport document description (IATA) : UN 2929 Toxic liquid, flammable, organic, n.o.s., 6.1, I
Transport document description (ADN) : UN 2929 TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S., 6.1(3), I
Transport document description (RID) : UN 2929 TOXIC LIQUID, FLAMMABLE , ORGANIC, N.O.S., 6.1 (3), I
14.3. Transport hazard class(es)
ADR- Transport hazard class(es) (ADR) : 6.1
(3) Danger labels (ADR) : 6.1, 3
IMDG- Transport hazard class(es) (IMDG) : 6.1
(3) Danger labels (IMDG) : 6.1, 3
IATA-Transport hazard class(es) (IATA) : 6.1
(3) Hazard labels (IATA) : 6.1, 3
ADN- Transport hazard class(es) (ADN) : 6.1
(3) Danger labels (ADN) : 6.1, 3
RID- Transport hazard class(es) (RID) : 6.1
(3) Danger labels (RID) : 6.1, 3

14.4. Packing group
Packing group (ADR) : I
Packing group (IMDG) : I
Packing group (IATA) : I
Packing group (ADN) : I
Packing group (RID) : I
14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available
14.6. Special precautions for user
Overland transport- Classification code (ADR) : TF1
Special provisions (ADR) : 274, 315
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E5
Packing instructions (ADR) : P001
Mixed packing provisions (ADR) : MP8 , MP17
Portable tank and bulk container instructions (ADR) : T14
Portable tank and bulk container special provisions (ADR) : TP2, TP27
Tank code (ADR) : L10CH
Tank special provisions (ADR) : TU14, TU15, TE19, TE21
Vehicle for tank carriage : FL
Transport category (ADR) : 1
Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV13, CV28
Special provisions for carriage – Operation (ADR) : S2, S9, S14
Hazard identification number (Kemler No.) : 663
Orange plates
: Tunnel restriction code (ADR) : C/D
EAC code : •3W
APP code : A(fl
) Transport by sea- Special provisions (IMDG) : 274, 315
Packing instructions (IMDG) : P001
Tank instructions (IMDG) : T14
Tank special provisions (IMDG) : TP2, TP13, TP27
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Properties and observations (IMDG) : Toxic if swallowed, by skin contact or by inhalation. MFAG-No : 131
Air transport- PCA Excepted quantities (IATA) : E5
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : 652
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 658
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A4, A137
ERG code (IATA) : 6F
Inland waterway transport- Classification code (ADN) : TF1
Special provisions (ADN) : 274, 315, 802
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E5
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP, EX, TOX, A
Ventilation (ADN) : VE01, VE02
Number of blue cones/lights (ADN) : 2
Rail transport- Classification code (RID) : TF1
Special provisions (RID) : 274, 315
Limited quantities (RID) : 0
Excepted quantities (RID) : E5
Packing instructions (RID) : P001
Mixed packing provisions (RID) : MP8, MP17
Portable tank and bulk container instructions (RID) : T14
Portable tank and bulk container special provisions (RID) : TP2, TP27
Tank codes for RID tanks (RID) : L10CH
Special provisions for RID tanks (RID) : TU14, TU15, TU38, TE21, TE22
Transport category (RID) : 1
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31 Hazard identification number (RID) : 663
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
DI-TERT BUTYLDICARBONATE is not on the REACH Candidate List
DI-TERT BUTYLDICARBONATE is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
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 : The substance is not 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 : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed
Denmark
Class for fire hazard : Class II-1
Store unit : 5 liter
Classification remarks : R10 H226;H315;H317;H319;H330;H335> 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
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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