

## 1. Product and Company Identification

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Product Name RXSOL-60-6604-619  
Product Type FUMARIC ACID FOR SYNTHESIS  
Revised date

### Company Details:

RX MARINE INTERNATIONAL  
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## 2. Composition / Information on ingredients

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Substance / Preparation : Ácido fumárico

CAS No :110-17-8

Substance.

Substance name Contents CAS No

Ácido fumárico : 100 % 110-17-8

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

## 3. Hazards Identification

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### 3.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : Xi; R36

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

Health hazards : Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

### 3.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : Xi : Irritant

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R Phrase(s) : R36 : Irritating to eyes.

S Phrase(s) : S2 : Keep out of the reach of children.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms

Signal words : Warning

Hazard statements : H319 : Causes serious eye irritation.

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.

☒ Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P264: Wash thoroughly after handling.

☒ Response : P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

### 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

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### 4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest.

Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact : Get medical advice. If eye irritation persists : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

Ingestion : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

Symptoms relating to use : Causes serious eye irritation.

#### 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).

## 5. Fire-fighting Measures

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#### 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

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#### 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.

#### 6.3. Methods and material for containment and cleaning up

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Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

## 7. Handling and Storage

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7.1. Precautions for safe handling

Handling : Wash thoroughly after handling.

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 closed when not in use.

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

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8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

☒ Respiratory protection : Wear approved mask.

☒ 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.

### 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

Odour threshold : No data available.

pH value : Not applicable.

Melting point [°C] : 298 - 300 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 375 °C

Flammability (solid, gas) : N/A

Flash point [°C] : 230 °C

Boiling point [°C] : 290 °C

Initial boiling point [°C] : N/A

Final boiling point [°C] : N/A

Evaporation rate : N/A

Vapour pressure [20°C] : N/A

Vapour pressure mm/Hg : 2.2 mm Hg at 165 °C

Vapour density : N/A

Density [g/cm<sup>3</sup>] : 1.635 g/cm<sup>3</sup> at 20 °C

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : 4.9 g/l at 20 °C

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : 2.1 at 4.9 g/l at 20

Viscosity at 40°C [mm<sup>2</sup>/s] : N/A

### 9.2. Other information

Explosive properties : N/A

Explosion limits - upper [%] : 40%

Explosion limits - lower [%] : 3%

Oxidising properties : No data available.

## 10. Stability and reactivity

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### 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

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### 11.1. Information on toxicological effects

#### Acute toxicity

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

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

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

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

Irritation : Causes serious eye 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.

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

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

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

## 12. Ecological information

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### 12.1. Toxicity

Toxicity information : Not established.

### 12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

### 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

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### 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

## 14. Transport information

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### 14.1. Land transport (ADR-RID)

General information : Not regulated.

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#### 14.2. Sea transport (IMDG) [English only]

General information : Not regulated.

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

General information : Not regulated.

## 15. Regulatory information

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#### 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

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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.

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

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