Material Safety Data Sheet

Maleic Anhydride (RXSOL-19-1346-025)

1. Product and Company Identifaction

Product Name	RXSOL-19-1346-025
Product Type	Maleic Anhydride

Company Details:

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

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

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2. Composition / informationon ingredients

Chemical Name	CAS Number	EC Number	Index number
Maleic Anhydride	108-31-6	203-571-6	607-096-00-9

3. Hazards Identification

Hazard description:
Information concerning particular hazards for human and environment:
R 22 Harmful if swallowed.
R 34 Causes burns.
R 42/43 May cause sensitisation by inhalation and skin contact.

4. First Aid Measures

General information	Immediately remove any clothing soiled by the product.Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation	Supply fresh air and to be sure call for a doctor.In case of unconsciousness place patient stably in side position for transportation.
After skin contact	Immediately wash with water and soap and rinse thoroughly.
After eye contact	Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing	Call for a doctor immediately. Drink plenty of water and provide fresh air. Call for a doctor immediately.

5. Fire-fighting Measures

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
Protective equipment: No special measures required.

6. Accidental Release Measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
Measures for cleaning/collecting: Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

7. Handling and Storage

Handling:
Information for safe handling: Thorough dedusting.Ensure good ventilation/exhaustion at the workplace.Prevent formation of dust.
Information about fire - and explosion protection: No special measures required.
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep container tightly sealed.

8. Exposure controls and personal protection

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

108-31-6 maleic anhydride

PEL (USA)	1 mg/m³, 0.25 ppm 1 mg/m³, 0.25 ppm
REL (USA)	0.4 mg/m³, 0.1 ppm SEN
TLV (USA)	Short-term value: 3 mg/m³
WEL (Great Britain)	Long-term value: 1 mg/m³ Sen

Additional information: The lists valid during the making were used as basis.
Personal protective equipment:
General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
Respiratory protection: Protective gloves In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Tightly sealed goggles

9. Physical and chemical properties

General Information

Form	Solid
Colour	White
Odour	Characteristic
Change in condition	

Melting point/Melting range	52.6°C
Boiling point/Boiling range	202°C
Flash point	103°C
Flammability (solid, gaseous)	Product is not flammable.
Ignition temperature	380°C
Danger of explosion	Product does not present an explosion hazard.

Explosion limits:

Lower	1.4 Vol %
Upper	7.1 Vol %
Vapour pressure at 20°C	0.2 hPa
Density at 20°C	1.48 g/cm³
Solubility in / Miscibility with water at 20°C	788 g/l

10. Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Dangerous reactions No dangerous reactions known.
Dangerous decomposition products: No dangerous decomposition products known.

11. Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Oral	LD50	400 mg/kg (rat)
Dermal	LC50	2620 mg/kg (rabbit)

Primary irritant effect:

on the skin	Caustic effect on skin and mucous membranes.
on the eye	Strong caustic effect.
Sensitization	Sensitization possible through inhalation. Sensitization possible through skin contact.

Additional toxicological information: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12. Ecological information

General notes: Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.

13. Disposal considerations

Product:
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

14. Transport information

Land transport ADR/RID (cross-border)

ADR/RID class	8 Corrosive substances.
Danger code (Kemler)	80
UN-Number	2215
Packaging group	III
Hazard label	8
Description of goods	2215 MALEIC ANHYDRIDE

Maritime transport IMDG

IMDG Class	8
UN Number	2215
Label	8
Packaging group	III
EMS Number	F-A,S-B
Marine pollutant	No
Proper shipping name	MALEIC ANHYDRIDE

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class	8
UN/ID Number	2215
Label	8
Packaging group	III
Proper shipping name	MALEIC ANHYDRIDE

15. Regulatory information

Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Risk phrases:
22 Harmful if swallowed.
34 Causes burns.
42/43 May cause sensitisation by inhalation and skin contact.
Safety phrases:
2 Keep out of the reach of children.
22 Do not breathe dust.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

16. Other information

This information is based on our present knowledge.However, this shall not constitute a guarantee for anys pecific product features and shall not establish a legally valid contractual relationship.

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