

# Safety Data Sheet

## RH5RD



C

Safety Data Sheet dated 14/7/2011, version 3

### 1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Trade name: RH5RD  
Product type and use: For electroplating industry

Company:  
LEGOR GROUP S.p.A.  
Via del Lavoro, 1  
36050 Bressanvido (VI)  
Italy

Emergency telephone number of the company and/or of an authorised advisory centre:  
LEGOR GROUP S.p.A.  
tel. +39 0444 467911 fax +39 0444 660677

Centro Antiveleni  
Ospedale di Niguarda "Ca Grande"  
Piazza Ospedale Maggiore 3  
20162 Milano  
Telephone: +39 (0) 2/66 10 10 29  
Telefax: +39 (0) 2/64 44 27 68  
Italiano (French, English)  
(24-hour-service)

### 2. HAZARDS IDENTIFICATION

The product is highly corrosive and, if brought into contact with the skin, causes serious burning, with the rapid destruction of the entire thickness of skin tissue.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:

17 % Rhodium (III) sulfate  
CAS: 10489-46-0  
C; R35

7.5 % sulphuric acid ... %  
N.67/548/CEE: 016-020-00-8 CAS: 7664-93-9 EC: 231-639-5  
C; R35

120 mg/kg potassium hydroxide; caustic potash  
N.67/548/CEE: 019-002-00-8 CAS: 1310-58-3 EC: 215-181-3  
Xn,C; R22-35

### 4. FIRST AID MEASURES

In case of skin contact:

Immediately take off all contaminated clothing.  
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

AP032-98/3

Page n. 1 of 5

# Safety Data Sheet

## RH5RD

OBTAIN IMMEDIATE MEDICAL ATTENTION.

In case of eyes contact:

Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. OBTAIN A MEDICAL EXAMINATION.

Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Give 1 pint of milk or water to drink. Give repeated drinks of water (one capful) every 10 minutes.

In case of Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. OBTAIN MEDICAL ATTENTION.

---

### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Water.

Extinguishers not to be used:

None in particular.

Risks arising from combustion:

Avoid inhaling the fumes.

Protective equipment:

Use protection for the respiratory tract.

---

### 6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:

Use a mask, gloves and protective clothing.

Environmental measures:

Limit leakages with earth or sand.

If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning methods:

Rapidly recover the product. To do so, wear a mask and protective clothing.

If the product is in a liquid form, stop it from entering the drainage system.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

---

### 7. HANDLING AND STORAGE

Handling precautions:

Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.

Do not eat or drink while working.

Incompatible materials:

None in particular.

Storage conditions:

Instructions as regards storage premises:

Adequately ventilated premises.

# Safety Data Sheet

## RH5RD

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Respiratory protection:

Not needed for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Eye protection:

Use close fitting safety goggles and/or visor conforming to BS 2092 GRADE 1).

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Exposure limit(s) (ACGIH):

sulphuric acid ... %

TLV TWA: 0,05 ppm, A2 - 0,2 mg/m<sup>3</sup>, A2 TLV STEL: A2

potassium hydroxide; caustic potash

TLV STEL: C 0,87 ppm - C 2 mg/m<sup>3</sup>

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Brown liquid
Odour:	Odourless
pH:	< 1
Melting point:	N.A.
Boiling point:	N.A.
Flash point:	N.A.
Solid/gas flammability:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.
Vapour pressure:	N.A.
Relative density:	1.35 g/ml
Solubility in water:	Total
Partition c. (n-octanol/H <sub>2</sub> O):	N.A.
Vapour density:	N.A.

---

### 10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions.

Substances to avoid:

Cyanides

Hazardous decomposition products:

It may generate flammable gases on contact with dithiocarbamates, elementary metals, and nitrides.

It may generate toxic gases on contact with amides, aliphatic and aromatic amines, azo, diazo, and hydrazine compounds, carbamates, inorganic fluorides, halogenated organic substances, isocyanates, sulphides, organic nitrous compounds, organophosphat

It may catch fire on contact with alcohols and glycols, aldehydes, dithiocarbamates, esthers, ethers, aromatic and aliphatic hydrocarbons, halogenated organic substances, isocyanates, ketones, sulphides, organic nitrous compounds, phenols, and cresols.

Contact with cyanides produces cyanidric acid (prussic acid)

# Safety Data Sheet

## RH5RD

### 11. TOXICOLOGICAL INFORMATION

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

RH5RD

Sulfuric acid

Inhalation of concentrated vapours may cause damages to respiratory system

causes burns to skin and mucosa

causes severe burns to eyes

Other toxicological data not available

---

### 12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

---

### 13. DISPOSAL CONSIDERATIONS

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

---

### 14. TRANSPORT INFORMATION

ADR-UN number:	2796, Shipping name: SULPHURIC ACID SOLUTION WITH NO MORE THAN 51% ACID
ADR-Shipping Name:	UN2796 - SULPHURIC ACID WITH NO MORE THAN 51% ACID
ADR-Label:	8
ADR-Packing Group:	II
Rail (RID):	8
IATA-Un number:	2796
IATA-Class:	8
IATA-Technical name:	UN2796 - SULPHURIC ACID WITH NO MORE THAN 51% ACID
IATA-Passenger Aircraft:	1 litre
IATA-Cargo Aircraft:	30 litres
IATA-Label:	8
IATA-Packing group:	II
IMDG-Un number:	2796
IMDG-Class:	8
IMDG-Technical name:	UN2796 - SULPHURIC ACID WITH NO MORE THAN 51% ACID
IMDG-Packing group:	II

---

### 15. REGULATORY INFORMATION

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments. Council Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparations) and subsequent amendments. Commission Directive 98/24/EC (Protection of the health and safety of workers from the risk related to chemical agent). Commission Directive 2000/39/EC (Occupational exposure limit values). Regulation (EC) No 1907/2006 (REACH). Regulation (EC) No 1272/2008 (CLP) (Annex VI). Regulation (EC) No 790/2009 (Annex IV, Annex V).

Symbols:

C Corrosive

R Phrases:

R35 Causes severe burns.

# Safety Data Sheet

## RH5RD

### S Phrases:

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

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### Contents:

sulphuric acid ...%

Rhodium (III) sulfate

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

---

## 16. OTHER INFORMATION

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand  
Reinold

ACGIH - Threshold Limit Values - 2004 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

---