

Printing date 05.03.2009 Revision: 24.05.2008

1 Identification of the substance/preparation

- · Product details
- · Trade name: Rubber Solution
- · Article number: -
- · Application of the substance / the preparation -
- · Manufacturer/Supplier:

Ying Paio Enterprise Co., Ltd.

No.480-3, Sec. 6, Yen-Ping N. Rd., Taipei, Taiwan, R.O.C.

- · Further information obtainable from: Contact person: Sue Chen
- · Information in case of emergency:

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2 Hazards identification

· Hazard description:







Xn Harmful

F Highly flammable

N Dangerous for the environment

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- R 11 Highly flammable.
- R 38 Irritating to skin.
- R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R 65 Harmful: may cause lung damage if swallowed.
- R 67 Vapours may cause drowsiness and dizziness.
- · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

· GHS label elements



Danger

2.6/2 - Highly flammable liquid and vapour.



Danger

3.10/1 - May be fatal if swallowed and enters airways.



Warning

3.2/2 - Causes skin irritation.

3.8/3 - May cause drowsiness or dizziness.



4.1/2 - Toxic to aquatic life with long lasting effects.

· Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

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Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

· Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN: Wash with plenty of soap and water.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see label).

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Collect spillage.

· Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

· Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

3 Composition/information on ingredients

- · Chemical characterization
- Description: Mixture of substances listed below with nonhazardous additions.

| · Dangerous components: | | |
|----------------------------|---|-----------|
| CAS: 108-87-2 | methylcyclohexane | 80- 85% |
| EINECS: 203-624-3 | X Xn, X Xi, 8 F, ½ N; R 11-38-51/53-65-67 | |
| Index number: 601-018-00-7 | ⁷ Danger: 🚸 2.6/2; 🗞 3.10/1 | |
| | Warning: 🕚 3.2/2, 3.8/3 | |
| | ♦ 4.1.C/2 | |
| CAS: 110-82-7 | cyclohexane | 0,05-0,2% |
| EINECS: 203-806-2 | Xn, Xi, № F, W N; R 11-38-50/53-65-67 | |
| Index number: 601-017-00-1 | Danger: 🚸 2.6/2; 🗞 3.10/1 | |
| | Warning: 🕸 4.1.C/1; 🕠 3.2/2, 3.8/3 | |

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · After inhalation: 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.

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· After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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 product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

- · Handling:
- · Information for safe handling:

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Protect from humidity and water.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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.

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Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Respiratory protection:

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:



Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

· 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 n.a.
- · Eye protection:



Tightly sealed goggles

| 9 Physical and chemical properties - General Information | | |
|---|--|--|
| | | |
| Colour: | Colourless | |
| Odour: | Characteristic | |
| · Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | 100°C | |
| · Flash point: | -4°C | |
| · Ignition temperature: | 260°C | |
| · Self-igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product is not explosive. However, formation of explosive air/vapou mixtures are possible. | |
| · Explosion limits: | | |
| Lower: | 1,1 Vol % | |
| · Vapour pressure at 20°C: | 48 hPa | |
| · Density: | Not determined. | |
| · Solubility in / Miscibility with | | |
| water: | Not miscible or difficult to mix. | |
| · Solvent content: | | |
| VOC (EC) | 85,23 % | |



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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:

108-87-2 methylcyclohexane

Oral | *LD50* | 2250 mg/kg (mouse)

110-82-7 cyclohexane

Oral LD50 12705 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · Ecotoxical effects:
- · Remark: Toxic for fish
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

 $Do \ not \ allow \ product \ to \ reach \ ground \ water, \ water \ course \ or \ sewage \ system.$

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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.

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14 Transport information

· Land transport ADR/RID (cross-border)





· ADR/RID class: 3 Flammable liquids.

Danger code (Kemler): 33
UN-Number: 1993
Packaging group: II
Hazard label: 3

· Description of goods: 1993 FLAMMABLE LIQUID, N.O.S. (METHYLCYCLOHEXANE)

· Maritime transport IMDG:



IMDG Class: 3
UN Number: 1993
Label 3
Packaging group: II
EMS Number: F-E,S-E
Marine pollutant: No

· Proper shipping name: FLAMMABLE LIQUID, N.O.S. (METHYLCYCLOHEXANE)

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 3 · UN/ID Number: 1993 · Label 3 · Packaging group: II

· Proper shipping name: FLAMMABLE LIQUID, N.O.S. (METHYLCYCLOHEXANE)

· UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., 3, II

· Environmental hazards: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID

15 Regulatory information

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

Caution - substance not yet fully tested.

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xn Harmful

F Highly flammable

N Dangerous for the environment

· Hazard-determining components of labelling:

methylcyclohexane

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· Risk phrases:

- 11 Highly flammable.
- 38 Irritating to skin.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.
- 67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 13 Keep away from food, drink and animal feedingstuffs.
- 16 Keep away from sources of ignition No smoking.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.

16 Other information

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

· Relevant R-phrases

- 11 Highly flammable.
- 38 Irritating to skin.
- 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.
- 67 Vapours may cause drowsiness and dizziness.

· Department issuing MSDS:

 $n.a. = nicht \ anwendbar / n.v. = nicht \ verfuegbar / n.g. = nicht \ geprueft / k.D.v. = keine \ Daten \ vorhanden.$

· Contact: Ms Beth

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Reglement internationale concernent le transport des merchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EU