

## Chemical Safety Data Sheet MSDS / SDS

**RUETASOLV BP 4103 - MIXTURE OF ISOMERES ISOPROPYLBIPHENYLS.  
FOR FURTHER DETAILS PLEASE INQUIRE AT MARKETING CONTACTS.  
SPECIALITY CHEMICALS**

Revision Date:2026-01-03 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : RUETASOLV BP 4103 - MIXTURE OF ISOMERES ISOPROPYLBIPHENYLS. FOR FURTHER DETAILS PLEASE INQUIRE AT MARKETING CONTACTS. SPECIALITY CHEMICALS

CBnumber : CB5511914

CAS : 25640-78-2

EINECS Number : 247-156-8

Synonyms : 1,1-Biphenyl, (1-methylethyl)-,ISOPROPYLBIPHENYL

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

**Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 010-86108875

**SECTION 2: Hazards identification****Classification of the substance or mixture**

Aspiration hazard, Category 1

Eye irritation, Category 2

Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 2

**Label elements****Pictogram(s)**

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Signal word : Danger

**Hazard statement(s)**

H304 May be fatal if swallowed and enters airways

H319 Causes serious eye irritation

H410 Very toxic to aquatic life with long lasting effects

#### **Precautionary statement(s)**

##### **Prevention**

P264 Wash ... thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P273 Avoid release to the environment.

##### **Response**

P301+P316 IF SWALLOWED: Get emergency medical help immediately.

P331 Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P391 Collect spillage.

##### **Storage**

P405 Store locked up.

##### **Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

##### **Other hazards**

no data available

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## SECTION 3: Composition/information on ingredients

### **Substance**

Product name : RUETASOLV BP 4103 - MIXTURE OF ISOMERES ISOPROPYLBIPHENYLS. FOR FURTHER DETAILS  
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Synonyms : 1,1-Biphenyl, (1-methylethyl)-,ISOPROPYLBIPHENYL

CAS : 25640-78-2

EC number : 247-156-8

MF : C15H16

MW : 196.288

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## SECTION 4: First aid measures

### **Description of first aid measures**

#### **If inhaled**

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately.

Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### **Following skin contact**

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### **Following eye contact**

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

#### **Most important symptoms and effects, both acute and delayed**

no data available

#### **Indication of any immediate medical attention and special treatment needed**

#### **Absorption, Distribution and Excretion**

Rats given (14)c-labeled 4-isopropylbiphenyl (25 mg/kg, orally or ip) excreted more (14)c in feces than in urine & retained 12.1%-16.1% of dose in the carcass after 48 hr. (14)c was observed in all tissues examined at 48 hr, but was unusually high only in fat.

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## SECTION 5: Firefighting measures

### **Extinguishing media**

Use dry chemical, carbon dioxide or alcohol-resistant foam.

### **Specific Hazards Arising from the Chemical**

no data available

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

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## SECTION 6: Accidental release measures

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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## SECTION 7: Handling and storage

### **Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

### Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### Individual protection measures

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Physical state	Liquid.
Colour	Colourless (APHA hazen colour grade 5).
Odour	no data available
Melting point/freezing point	-15 °C. Remarks:Pour point was determined according to ISO 3016.
Boiling point or initial boiling point and boiling range	294 °C. Atm. press.:1 013 hPa. Remarks:Initial boiling point.;304 °C. Atm. press.:1 013 hPa.
Flammability	Remarks:Vapour temperature after distillation of 95% of substance.
Lower and upper explosion limit/flammability limit	no data available
Flash point	no data available
Flash point	145 °C. Atm. press.:1 013 hPa.

Auto-ignition temperature	> 430 °C. Atm. press.:Ca. 101 kPa.
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	kinematic viscosity (in mm <sup>2</sup> /s) = 8.9. Temperature:20°C.;kinematic viscosity (in mm <sup>2</sup> /s) = 4.92. Temperature:40°C.
Solubility	In water = 0.6 mg/l at 25 deg C
Partition coefficient n-octanol/water	log Pow = 5.33. Remarks:Ambient temp., isomer A.;log Pow = 5.51. Remarks:Ambient temp., isomer B.
Vapour pressure	0.762 Pa. Temperature:25 °C.
Density and/or relative density	0.981 g/cm <sup>3</sup> . Temperature:20 °C.
Relative vapour density	no data available
Particle characteristics	no data available

## SECTION 10: Stability and reactivity

### Reactivity

no data available

### Chemical stability

no data available

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

no data available

### Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 - rat - 4 650 mg/kg bw. Remarks:S.E. = 640 mg/kg bw.
- Inhalation: LC0 - rat (male) - 1.67 mg/L air.
- Dermal: LD50 - rabbit - > 5 000 mg/kg bw.

### Skin corrosion/irritation

no data available

### **Serious eye damage/irritation**

no data available

### **Respiratory or skin sensitization**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

no data available

### **Reproductive toxicity**

no data available

### **STOT-single exposure**

no data available

### **STOT-repeated exposure**

no data available

### **Aspiration hazard**

no data available

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## **SECTION 12: Ecological information**

### **Toxicity**

Toxicity to fish: LC50 - *Oryzias latipes* - 0.6 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - 0.24 mg/L - 48 h.

Toxicity to algae: EL50 - *Desmodesmus subspicatus* (previous name: *Scenedesmus subspicatus*) - > 100 mg/L - 72 h.

Toxicity to microorganisms: no data available

### **Persistence and degradability**

More than 80% of the added isopropylbiphenyl biodegraded aerobically within 48 hr in a sediment-water sample using the River Die-Away Test(1). In sewage sludge tests, isopropylbiphenyl was biodegraded 60% in 24 hours and completely biodegraded within one week(1).

### **Bioaccumulative potential**

An estimated BCF value of 5300 was calculated for isopropylbiphenyl(SRC), using a measured log Kow of 5.20(1,SRC) and a recommended regression-derived equation(2). According to a recommended classification scheme(3), this BCF value suggests that bioconcentration in aquatic organisms will be very high(SRC).

### **Mobility in soil**

The Koc of isopropylbiphenyl is estimated as approximately 16000(SRC), using a measured log Kow of 5.20(1) and a regression-derived equation(2,SRC). According to a recommended classification scheme(3), this estimated Koc value suggests that isopropylbiphenyl will be

immobile in soil(SRC).

### **Other adverse effects**

no data available

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## **SECTION 13: Disposal considerations**

### **Disposal methods**

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## **SECTION 14: Transport information**

### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Transport hazard class(es)**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Packing group, if applicable**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Environmental hazards**

ADR/RID: Yes

IMDG: Yes

IATA: Yes

## Special precautions for user

no data available

## Transport in bulk according to IMO instruments

no data available

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## SECTION 15: Regulatory information

### Safety, health and environmental regulations specific for the product in question

#### European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

#### EC Inventory

Listed.

#### United States Toxic Substances Control Act (TSCA) Inventory

Listed.

#### China Catalog of Hazardous chemicals 2015

Not Listed.

#### New Zealand Inventory of Chemicals (NZIoC)

Listed.

#### PICCS

Listed.

#### Vietnam National Chemical Inventory

Listed.

#### IECSC

Not Listed.

#### Korea Existing Chemicals List (KECL)

Not Listed.

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## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

## References

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pagelD=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pagelD=0&request_locale=en)

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.