

MATERIAL SAFETY DATA SHEET

TYFOS 722 SL

1. Identification

1.1 Product identifiers

Product name: Propamocarb HCl 722 g/L SL

Chemical name: Propyl 3-(dimethylamino)propylcarbamate hydrochloride

CAS-No. : 25606-41-1

1.2 Recommended use of the chemical and restrictions on use Fungicide

1.3 Details of the supplier of the safety data sheet

Company:

JIANGSU QIAOJI BIOCHEM CO., LTD.

located at No.168, Qiuhe Road (S), Duntou Town, Hai An County, Jiangsu 226692, P.R. China

Telephone: +86-513-88433136

Fax: +86-513-88433168

1.4 Emergency telephone number

+86-513-88433136

2. Hazards Identification

2.1 Classification of the substance or mixture

Skin sensitization, Category 1

2.2 GHS label elements, including precautionary statements Pictogram(s)



Signal word	Warning	Hazard statement(s)	H317 May cause an allergic skin reaction
Precautionary statement(s)			
Prevention			P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response			P302+P352 IF ON SKIN: Wash with plenty of water/... P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P321 Specific treatment (see ... on this label). P362+P364 Take off contaminated clothing and wash it before reuse.
Storage			none
Disposal			P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

No additional information available

3. Composition / Information on Ingredients

3.1 Substances

Ingredient Name	CAS Number	Concentration
Propamocarb HCl	25606-41-1	722 g/Lt
Inerts	---	Balance

4. First-Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms/effects, acute and delayed

May cause an allergic skin reaction.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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

8. Exposure Controls/Personal Protection

8.1 Control parameters

Occupational Exposure limit values: No data available **Biological limit values:** No data available

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. 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

Wear dust mask when handling large quantities.

Thermal hazards No

data available.

Control of environmental exposure Avoid release to the environment.

9. Physical and Chemical Properties

Appearance and odor: Clear, colorless to light yellow liquid

Odor: Typical odor

Boiling point: N/A **Vapor pressure (mPa):** Negligible **Specific Gravity:** 1.085 g/ml at 20°C

Solubility (g/L) at 20°C: Form solution with water.

Molecular formula: C₉H₂₁ClN₂O₂ **Molecular weight:** 224.7

10. Stability and Reactivity

10.1 Stability: The product is non-reactive under normal conditions of use, storage and transport.

10.2 Conditions to avoid: None under recommended storage and handling conditions (see section 7).

10.3 Incompatibility with other materials: No additional information available.

10.4 Hazard decomposition: Under normal conditions of storage and use, hazardous decomposition products should not be produced. **10.5 Hazardous polymerization:** Will not occur.

11. Toxicological information

Acute oral: LD₅₀ for rats 2000~2900 mg/kg

Acute dermal: LD₅₀ for rabbits >3000 mg/kg

Skin irritation: Practically non-irritating (rabbits)

Eye irritation: Moderately and reversibly irritating (rabbits)

Inhalation: (4 h) > 8 mg/L

NOEL (2 y) for rats 1000, dogs 3000 ppm diet.

12. Ecological Information

12.1 Toxicity

Fish toxicity: (96 h) LC₅₀ rainbow trout > 99, and bluegill sunfish > 92 mg/L **Daphnia toxicity:** (48 h) EC₅₀ > 106 mg/L *Daphnia magna*.

Toxicity to algae: IrC₅₀ (90 h) algae (*Scenedesmus quadricauda*) 595 mg/L, IbC₅₀ (90 h) algae (*Scenedesmus quadricauda*) 378 mg/L

Bird toxicity: LD₅₀ pheasant 3050, mallard duck > 6289 mg/kg. **Bee toxicity:** Not toxic to bees.

12.2 Persistence and degradability

Not established.

12.3 Bioaccumulative potential

Not established.

12.4 Mobility in soil

EU 2017 dossier: Lab studies DT₅₀ range 8-149 days (normalised), DT₉₀ range 37-454; Field studies DT₅₀ range 17.4-23.7 days

12.5 Results of PBT and vPvB assessment No additional information available 12.6 Other adverse effects

No additional information available.

13. Disposal considerations

13.1 Waste treatment 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.

14. Transport Information

14.1 UN number

UN-No. (ADR): Not applicable
UN-No. (IMDG): Not applicable
UN-No. (IATA): Not applicable
UN-No. (ADN): Not applicable
UN-No. (RID): Not applicable

14.2 UN proper shipping name

Proper Shipping Name(ADR): Not applicable
Proper Shipping Name(IMD)G: Not applicable
Proper Shipping Name(IATA): Not applicable
Proper Shipping Name(ADN): Not applicable
Proper Shipping Name(RID): Not applicable

14.3 Transport hazard class(es)

Transport hazard class(es)(ADR): Not applicable
Transport hazard class(es)(IMDG): Not applicable
Transport hazard class(es)(IATA): Not applicable
Transport hazard class(es)(ADN): Not applicable
Transport hazard class(es)(RID): Not applicable

14.4 Packing group

Packing group (ADR): Not applicable Packing group (IMDG): Not applicable
Packing group (IATA): Not applicable
Packing group (ADN): Not applicable
Packing group (RID): Not applicable

14.5 Environmental hazards

Dangerous for the environment: No
Marine pollutant: No
Other information: No supplementary information available

14.6 Special precautions for user

Not applicable

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory Information

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

Chemical name	Common names and synonyms	CAS number	EC number
propamocarb hydrochloride	propamocarb hydrochloride	25606-41-1	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed.

16. Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.