

Hangzhou Volant Technology Co.,Ltd

MATERIAL SAFETY DATA SHEET OF TETRABUTYLPHOSPHONIUM BROMIDE

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Tetrabutylphosphonium bromide

Product Number: T112

Brand: Volant

CAS No.: 3115-68-2

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Hangzhou Volant Technology Co., Ltd

Address: No.6, Hangtai North Road, Zhongtai Industrial Park, Yuhang District, Hangzhou, China.

Telephone: +86-571-85023839-822

Fax: +86-571-81634339

E-mail address: jianjun.tian@volantgroup.com

1.4 Effective information

Enterprise emergency phone: +86-571-85021780 Technical instruction coding: QHSE-QA-T112

Version No.: B

Effective date: Jan 02, 2022 Expiration Date: Jan 01, 2027 杭州孚伦特科技有限公司 HANGZHOU VOLAKT TECHNOLOGY CO.,LTO.

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 3), H311

Serious eye damage (Category 1), H318

Skin sensitization (Sub-category 1B), H317

Reproductive toxicity (Category 2), H361fd

Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Pictogram





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Signal word Danger

Hazard statement(s)

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard

Statements none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name: TETRABUTYLPHOSPHONIUM BROMIDE

CAS:3115-68-2 EC No:221-487-8

Formula C16H36BrP

Molecular Weight:339.35/mol

4. FIRST AID MEASURES

4.1 After inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

4.2 After skin contract

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Call a physician.

4.3 After eye contract

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

4.4 After ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.



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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

5.2 Special risks

Specific Hazard(s): Emits toxic fumes under fire conditions.

5.3 Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Person precaution procedures to be followed in case of leak or spill

Evacuate area.

6.2 Procedure(S) of personal precaution(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

6.3 Methods for cleaning up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

7.1 Handling

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

7.2 Storage

Conditions of Storage: Keep tightly closed.

7.3 Special requirements

Hygroscopic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Engineering controls

Use only in a chemical fume hood. Safety shower and eye bath.

8.2 General hygiene measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

8.3 Personal protective equipment

Respiratory Protection

Use respirators and components tested and approved under appropriate government standards. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.



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Hand Protection

Compatible chemical-resistant gloves.

Eye Protection

Chemical safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance Color: White to off-white

Form: Fine crystals

b)Property Value At Temperature or Pressure

c)pH no data available d)BP/BP Range no data available

e)MP/MP Range 99-102°C

f)Flash Point 290 °C Method: closed cup

g)Flammability no data available no data available h)Autoignition Temp i)Oxidizing Properties no data available j)Explosive Properties no data available k)Explosion Limits no data available no data available I)Vapor Pressure no data available m)Partition Coefficient no data available n)Viscosity o)Vapor Density no data available p)Saturated Vapor Conc. no data available q)Evaporation Rate no data available r)Bulk Density no data available no data available s)Decomposition Temp. t)Solvent Content no data available u)Water Content no data available no data available v)Surface Tension no data available w)Conductivity x)Miscellaneous Data no data available y)Solubility no data available

10. STABILITY AND REACTIVITY

10.1 Stability

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

10.2 Hazardous decomposition products

Carbon monoxide, Carbon dioxide,



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Hydrogen bromide gas, Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

10.3 Hazardous Polymerization

Will not occur

11. TOXICOLOGICAL INFORMATION

11.1 Signs and symptoms and symptoms of exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.2 Route of exposure

Skin Contact: Causes skin irritation.

Skin Absorption: Harmful if absorbed through skin.

Eye Contact: Causes eye irritation.

Inhalation: Material is irritating to mucous membranes and upper

respiratory tract. May be harmful if inhaled.

Ingestion: Harmful if swallowed.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Other adverse effects

Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Substance disposal

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 3464 IMDG: 3464 IATA: 3464

14.2 UN proper shipping name



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ADR/RID: Organophosphorus compound IMDG: Organophosphorus compound IATA: Organophosphorus compound

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: NO IMDG Marine pollutant: NO IATA: NO

15. REGULATORY INFORMATION

15.1 Classification and labeling according to EU directives

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 36/37/38-21/22

Irritating to eyes, respiratory system and skin. Harmful in contact with skin and if swallowed.

S-PHRASES: 26-37/39

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

15.2 Country specific information

Germany

WGK: 1

Self-Classification

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Hangzhou Volant Technology Co., Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.



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分析报告单

CERTIFICATE OF ANALYSIS

产品名称	四丁基溴化膦	产品编号	T112
Product Name	TetraButylPhosphonium Bromide	Product Code	1112
CAS 号	2445 60 2	UN 号	2464
CAS No.	3115-68-2	UN No.	3464
化 名	TBPBr	指标号	T112 - Spec 1
Pseudonyms	IBPBI	Specification No.	1112 - Spec 1
批号	220617 1	生产日期	2023年06月
Batch No.	230617-1	Manu. Date	Jun. 2023
重 量	1500kg	复测日期	2024年06月
Quantity		Retest. Date	Jun. 2024
制造商	江西新信化学有限公司		
Manufacturer	Jiangxi Xinxin Chemical Co., Ltd		

检验项目	检验标准	检验结果	判定
ITEMS	SPECIFICATION	RESULTS	DECISION
外 观	白色至类白色晶体	符合	合格
Appearance	White to off-white Crystal	conforms	OK
含量	98.0% Min	99.8%	合格
Assay ™	98.0 % WIII1	99.6%	OK
熔点	99-104℃	100.4-101.5℃	合格
M.P	99-104 C	100.4-101.5 C	OK
水 分	1.0% Max	0.45%	合格
Water(KF)	1.0 % IVIAX	0.4376	OK
结 论	符合企业标准		
CONCLUSION	CONFORM TO THE ENTERPRISE STANDARD		
备注	储存建议,密封,避光,<30℃。		
NOTE	Storage conditions: Sealed, avoid light, less than 30°C		

检验人/日期 (Analyst/Date): 钟紫珺 2023-07-24

复核人/日期 (Check/Date): 田建军 2023-07-24



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外 观	白色至类白色晶体	符合	合格
Appearance	White to off-white Crystal	conforms	OK
含量	98.0% Min	99.8%	合格
Assay ™	98.0 % WIII1	99.6%	OK
熔点	99-104℃	100.4-101.5℃	合格
M.P	99-104 C	100.4-101.5 C	OK
水 分	1.0% Max	0.45%	合格
Water(KF)	1.0 % IVIAX	0.4376	OK
结 论	符合企业标准		
CONCLUSION	CONFORM TO THE ENTERPRISE STANDARD		
备注	储存建议,密封,避光,<30℃。		
NOTE	Storage conditions: Sealed, avoid light, less than 30°C		

检验人/日期 (Analyst/Date): 钟紫珺 2023-07-24

复核人/日期 (Check/Date): 田建军 2023-07-24



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Material safety data sheet of Triphenyl phosphite

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

1.1 Product identifiers

Product name: Triphenyl phosphite

Product Number: T115

Brand : Volant CAS-No. : 101-02-0

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Hangzhou Volant Technology Co., Ltd

Address: No.6, Hangtai North Road, Zhongtai Industrial Park, Yuhang District, Hangzhou, China.

Telephone: +86-571-85023839-822

Fax: +86-571-81634339

E-mail address : jianjun.tian@volantgroup.com

1.4 Effective information

Enterprise emergency phone: +86-571-85021780
Technical instruction coding: QHSE-QA-T115

Version No.: D

Effective date: Oct 10, 2022 Expiration Date: Oct 09, 2027 杭州孚伦特科技有限公司 HANGZHOU YOLAKT TECHNOLOGY CO.,LTD.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

Skin sensitization (Category 1), H317

Eye irritation (Category 2), H319

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant R36/38 N Dangerous for the R50/53

environment

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008



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Pictogram

Signal word Danger Hazard statement(s)

H302 Harmful if swallowed.H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

P391 Collect spillage. Supplemental

Hazard none

Statements

According to European Directive 67/548/EEC as amended.

Hazard symbol(s) Xi Irritant

N Dangerous for the environment

R-phrase(s)

R36/38 Irritating to eyes and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects

in the aquatic environment.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

S61 Avoid release to the environment. Refer to special instructions/ Safety

data sheets.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1Mixtures

Formula: C18H15O3P

Molecular weight: 310,28 g/mol

CAS-No.: 101-02-0

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Hazardous ingredients



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Component	Classification	Concentration
Triphenyl phosphite	Acute toxicity, Oral (Category 4), H302	<= 100 %
	Skin irritation (Category 2), H315	
	Skin sensitization (Category 1), H317	
	Eye irritation (Category 2), H319	
	Acute aquatic toxicity (Category 1), H400	
	Chronic aquatic toxicity (Category 1), H410	

SECTION 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 and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Oxides of phosphorus.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.



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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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store under inert gas. Air sensitive. Moisture sensitive.

7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

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 Regulation (EU)

2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 480 min



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Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 480 min

Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace..

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

Control of environmental exposure

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: clear

b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing 22 - 24 °C - lit.

point

f) Initial boiling point and 360 °C - lit.

boiling range

g) Flash point 210 °C

h) Evapouration rate no data available
i) Flammability (solid, gas) no data available
j) Upper/lower no data available



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flammability or explosive limits

k) Vapour pressure >= 0,00 hPa at 25 °C

I) Vapour density no data available

m) Relative density 1,184 g/mL at 25 °C n) Water solubility no data available

o) Partition coefficient: n- no data available octanol/water

p) Auto-ignition > 400 °C temperature at 1013,250 hPa

q) Decomposition no data available temperature

r) Viscosity 17,7 mm2/s at 20 °C - s) Explosive properties no data available t) Oxidizing properties no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

Contains the following stabiliser(s):

Phenol (0,5 %).

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 1.590 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 1 h - > 6,7 mg/l



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(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes. - 7 d

(OECD Test Guideline 405)

Respiratory or skin sensitisation

- Mouse

Result: May cause sensitisation by skin contact.

(OECD Test Guideline 429)

Germ cell mutagenicity

Ames test

Salmonella typhimurium

Result: negative

OECD Test Guideline 474

Mouse - male and female

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level -

15 mg/kg

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated..

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability



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Biodegradability aerobic - Exposure time 28 d

Result: 0,14 % - Not readily biodegradable.

(OECD Test Guideline 301D)

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3082 IMDG: 3082 IATA: 3082

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Triphenyl phosphite)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Triphenyl phosphite)

IATA: Environmentally hazardous substance, LIQUID, n.o.s. (Triphenyl phosphite).

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

14.6 Special precautions for user

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination



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packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Hangzhou Volant Technology Co.Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.



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分析报告单

CERTIFICATE OF ANALYSIS

产品名称	亚磷酸三苯酯	产品编号	T115
Product Name	Triphenyl phosphite	Product Code	1113
CAS 号	101-02-0	UN 号	3082
CAS No.	101-02-0	UN No.	3002
化 名	TPPI	指标号	T115 - Spec 2
Pseudonyms	1111	Specification No.	1110 Opco 2
批号	20230720	生产日期	2023年07月
Batch No.	20230720	Manu. Date	Jul. 2023
重量	025kg	复测期限	2024年07月
Quantity	925kg	Retest. Date	Jul. 2024

检验项目	检验标准	检验结果	判定
ITEMS	SPECIFICATION	RESULTS	DECISION
外 观 Appearance	白色至类白色结晶; White to off-white crystalline 无色透明液体(熔融状态下) Colorless transparent liquid (molten state)	无色透明液体 Colorless transparent liquid	合格 OK
色 度 Color	50 max	12	合格 OK
折 光 率 Refractive index	1.588-1.590	1.5892	合格 OK
密 度 Density	1.180-1.186(25℃)	1.184	合格 OK
凝固点 Freezing point	19-24℃	22.8℃	合格 OK
酸 值 Acid value	≤0.50 KOH mg/g	0.06	合格 OK
结 论	符合企业标准		
CONCLUSION	CONFORM TO THE ENTERPRISE STANDARD		
备 注 NOTE			

 检验人/日期 (Analyst/Date):
 钟紫珺
 2023-07-26

 复核人/日期 (Checker/Date):
 田建军
 2023-07-26