

Safety Data Sheet

#36702993 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Formylmethyl triphenylphosphonium chloride	62942-43-2	HCOCH ₂ P(Cl)(C ₆ H ₅) ₃	10	13 Oct 2026

SECTION 1

Identification

1.1 Product identifier

Product name	Formylmethyl triphenylphosphonium chloride
CAS number	62942-43-2
EC / EINECS number	263-767-2
Chemical formula	HCOCH ₂ P(Cl)(C ₆ H ₅) ₃
Molecular weight	340.78
SMILES	[Cl-].O=CC[P+](C1=CC=CC=C1)(C1=CC=CC=C1)C1=CC=CC=C1

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

Research and development. Laboratory Chemicals. Manufacture of substances.
Not suitable for human consumption or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Acute toxicity (Category 4), H302
Serious eye damage (Category 1), H318

2.2 Label elements



DANGER

CODE	HAZARD STATEMENT
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H302	Harmful if swallowed
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H318	Causes serious eye damage
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CODE	PRECAUTIONARY STATEMENT
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
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P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
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2.3 Other hazards

Contains no PBT or vPvB components or endocrine disruptors at levels of 0.1% or higher.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Formylmethyl triphenylphosphonium chloride
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CAS number	62942-43-2
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EC number	263-767-2
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Concentration / purity	<= 100 %
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Classification according to Regulation (EC) No 1272/2008	Acute toxicity (Category 4), H302 Serious eye damage (Category 1), H318
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Hazard statements	H302, H318
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Acute toxicity estimate (ATE)	None reported
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Impurities / stabilising additives	<i>Not applicable</i>
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SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move to fresh air.
Skin contact	Immediately remove all contaminated clothing; rinse skin with water/shower.
Eye contact	Rinse out with plenty of water, remove contact lenses, and immediately call an ophthalmologist.
Ingestion	Immediately make victim drink water (two glasses at most); consult a physician.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

Most important known symptoms and effects are described in the labelling (section 2.2) and/or section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, foam, carbon dioxide (CO₂), dry powder.

Unsuitable extinguishing media No limitations of extinguishing agents are given for this substance.

5.2 Special hazards arising from the substance or mixture

Corrosive.
Combustible.
Carbon monoxide (CO)
Carbon dioxide (CO₂)
Oxides of phosphorus
Hydrogen chloride gas
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus; knock down gases/vapours with water spray and prevent firefighting water from contaminating surface or ground water.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhaling dust and substance contact, ensure adequate ventilation, evacuate the danger area and consult an expert.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains, take up dry avoiding dust generation, dispose of properly and clean affected area.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

See precautions in section 2.2. Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs.

Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	2 to 8 °C
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Conditions for safe storage (incompatibilities)	Keep tightly closed and dry at 2-8 °C; storage class 11 (combustible solids).
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7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL)	Contains no substances with occupational exposure limit values.
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DNEC/PNEC data	DNEL/DMEL: Not reported PNEC: Not reported
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8.2 Exposure controls

Eye / face protection	Chemical splash goggles Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Gloves: Nitrile Rubber, 0.11mm (480 mins).
Respiratory protection	Half-mask with filter Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.
Other protection	Protective clothing.
Environmental exposure controls	Do not let product enter drains.

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Crystalline solid DERIVED FROM: LITERATURE
Colour	Yellow DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	209 - 212 °C (decomposes) DERIVED FROM: LITERATURE
Boiling point	<i>No data available</i>
Flammability	<i>Not applicable</i>
Lower and upper explosion limit	<i>No data available</i>
Flash point	<i>Not applicable</i>
Auto-ignition temperature	<i>No data available</i>
Decomposition temperature	<i>No data available</i>
pH	<i>No data available</i>
Acidity	Acid DERIVED FROM: LITERATURE
Kinematic viscosity	<i>No data available</i>
Solubility	<i>No data available</i>
Partition coefficient n-octanol/water (log value)	<i>No data available</i>
Vapour pressure	<i>No data available</i>
Density (g/mL)	<i>Not applicable</i>

Relative vapour density	No data available
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Particle characteristics	No data available
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9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

In fine distribution, when whirled up, a dust explosion potential may generally be assumed.

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

Violent reactions possible with strong oxidizing agents.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	LD50 Oral - Rat - 810 mg/kg LD50 Dermal - Rat - > 2,000 mg/kg
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Skin corrosion / irritation	No data available
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Eye corrosion / irritation	Eyes - Rabbit: Severe eye irritation. Causes serious eye damage
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Respiratory / skin sensitisation	No data available
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Carcinogenicity	No data available
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Mutagenicity	No data available
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Reproductive toxicity	No data available
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STOT (single / repeated exposure)	No data available
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Aspiration hazard	Material is a solid.
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11.2 Information on other hazards

Does not contain components considered to have endocrine disrupting properties at levels of 0.1% or higher.

SECTION 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 Results of PBT and vPvB assessment

Contains no components considered to be PBT or vPvB at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance-specific regulations (e.g. licences) Observe maternity protection work restrictions per Dir 92/85/EEC and Dir 94/33/EC on protection of young people at work.

REACH code Y110

ECHA notification *Not applicable*

15.2 Chemical safety assessment

No

SECTION 16

Other information

Revision notes / other information This version (v10) was created on 13.10.2026 and is the first version of this SDS.

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.