

Chlorphenesin

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 8/4/2020 Revision date: 4/28/2025 Version: 2.0

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

1.1. Product identifier

Product form : Substance
Trade name : Chlorphenesin
IUPAC name : 3-(4-chlorophenoxy)propane-1,2-diol
EC-No. : 203-192-6
CAS-No. : 104-29-0
REACH registration No. : 01-2120758358-42-****
Formula : C9H11ClO3

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

Relevant identified uses

Use of the substance/mixture : Used as preservative.

Uses advised against

Restrictions on use : No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

WEINAN CHANGTONG PHARMACHEM TECH CO.,LTD
Weinan economy technology Developmentarea, Weinan City, Shaanxi
Province, China 714000
T: +86-913-2583620 F: +86-913-2583622
E-mail: changtong@zleyholdings.com Website: www.zleyholdings.com

Only Representative

REACH24H CONSULTING GROUP
Paramount Court, Corrig Road, Sandyford, Dublin 18, Ireland
T +353 1 8899951
Info@reach24h.com

1.4. Emergency telephone number

Emergency number : +86-18626205929

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Other hazards which do not result in classification : No information available.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Chlorphenesin	CAS-No.: 104-29-0 EC-No.: 203-192-6	$\geq 98 - \leq 100$	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated clothing.
First-aid measures after eye contact : Get medical advice if necessary. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. Rinse mouth thoroughly with water.
First-aid measures for first aider : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes skin irritation. Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. dry chemical powder.
Unsuitable extinguishing media : No information available.

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5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂). Hydrogen chloride.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. No flames, no sparks. Eliminate all sources of ignition.
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For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with skin and eyes.

For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Wear personal protective equipment. Ensure good ventilation of the work station. Avoid contact with eyes. Avoid dust formation. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Avoid dust formation.
Storage conditions	: Keep the container hermetically sealed. Keep cool. Store in a well-ventilated place. Keep away from ignition sources.
Incompatible materials	: Oxidizing agent.
Packaging materials	: Store always product in container of same material as original container.

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7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

Chlorphenesin (104-29-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	467 µg/kg dw
Long-term - systemic effects, inhalation	1.64 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	167 µg/kg dw
Long-term - systemic effects, inhalation	0.247 mg/m³
Long-term - systemic effects, dermal	0.167 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	100 µg/L
PNEC aqua (marine water)	10 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	817 µg/kg dw
PNEC sediment (marine water)	81.7 µg/kg wet weight
PNEC (Soil)	
PNEC soil	0.105 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	7.13 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency shower installed. Eliminate all sources of ignition.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Eye and face protection

Eye protection:

Safety glasses

Skin protection

Skin and body protection:

Protective clothing

Hand protection:

Protective gloves

Respiratory protection

Respiratory protection:

In case of breathable dust and/or fumes, use a self-contained breathing apparatus

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Environmental exposure controls

Environmental exposure controls:

Do not allow to enter drains or water courses. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Appearance	: White solid.
Molecular mass	: 202.63 g/mol
Odour	: slight.
Odour threshold	: Not available
Melting point	: 78.6 °C @101,325 Pa
Freezing point	: Not applicable
Boiling point	: 341.1 °C @101,325 Pa
Flammability	: Non flammable.
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: 5.471 g/l
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 1.23
Vapour pressure	: 0.000494 Pa @25 °C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.725
Relative vapour density at 20°C	: Not applicable
Particle size	: d90 = 94.86 µm d50 = 52.43 µm d10 = 19.09 µm

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Store away from heat. Moisture.

10.5. Incompatible materials

Oxidising agents.

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10.6. Hazardous decomposition products

Thermal decomposition may produce : Carbon oxides (CO, CO₂). Hydrogen chloride.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Chlorphenesin (104-29-0)	
LD50 oral rat	3000 mg/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Chlorphenesin (104-29-0)	
NOAEL (rat, F0/P)	100 mg/kg bw/day
NOAEL (rat, F1)	100 mg/kg bw/day
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Chlorphenesin (104-29-0)	
NOAEL (oral, rat, 28 days)	100 mg/kg bodyweight/day
Aspiration hazard	: Not classified

Chlorphenesin (104-29-0)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Chlorphenesin (104-29-0)	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l

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Chlorphenesin (104-29-0)

ErC50 algae	> 100 mg/l
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12.2. Persistence and degradability

Chlorphenesin (104-29-0)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

Chlorphenesin (104-29-0)

Partition coefficient n-octanol/water (Log Pow)	1.23
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Chlorphenesin (104-29-0)

Partition coefficient n-octanol/water (Log Pow)	1.23 (at 23 °C (at pH 6.4)
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Chlorphenesin (104-29-0)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Other adverse effects : No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Inland waterway transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)
Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)
Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)
Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)
Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)
Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)
Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items
Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

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Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Disclaimer: The aforementioned regulations reflect the status at the time of SDS preparation and may not be fully comprehensive or current. Users are advised to consult the latest regulations and control lists before use.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
ACGIH	American Conference of Government Industrial Hygienists
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWG	European waste catalogue
IARC	International Agency for Research on Cancer
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration

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Abbreviations and acronyms:

NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Version : 2.0
Issue date : 8/4/2020
Revision date : 4/27/2025
Data sources : LOLI. ECHA reference.
Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information : None.

Full text of H- and EUH-statements:

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.