Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

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

· **1.1 Product identifier**
· **Trade name: Bouin Hollande liquid**
· **SDS number:** CH1877
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
For professional users only
No further relevant information available.
· **Life cycle stages**
IS Use at industrial Sites
F Formulation or re-packing
· **Sector of Use**
SU9 Manufacture of fine chemicals
SU24 Scientific research and development
· **Product category**
PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
PC21 Laboratory chemicals
PC29 Pharmaceuticals
PC40 Extraction agents
· **Process category**
PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4 Chemical production where opportunity for exposure arises
PROC5 Mixing or blending in batch processes
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC15 Use as laboratory reagent
· **Environmental release category**
ERC1 Manufacture of the substance
ERC2 Formulation into mixture
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC6a Use of an intermediary
· **Application of the substance / the mixture** Chemicals products for laboratory

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
CARLO ERBA REAGENTS
Chaussée du Vexin
Parc d'Affaires des Portes - BP616
27106 VAL DE REUIL Cedex
Téléphone: +33 (0)2 32 09 20 00
Télécopie: +33 (0)2 32 09 20 20
· **Further information obtainable from:**
Q.A / Normative
email: MSDS_CER-SDS@cer.dgroup.it
· **1.4 Emergency telephone number:**
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

(Contd. on page 2)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 1)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 1B H350 May cause cancer. Route of exposure: Inhalation.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**
formaldehyde..%
· **Hazard statements**
H317 May cause an allergic skin reaction.
H350 May cause cancer. Route of exposure: Inhalation.
· **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Additional information:**
Restricted to professional users.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable*
· **vPvB:** *Not applicable*
· **Determination of endocrine-disrupting properties** *Not applicable*

(Contd. on page 3)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

· ***3.2 Mixtures***
· ***Description:***
Mixture made by the following substances:

CAS: 7732-18-5 *EINECS: 231-791-2* *RTECS: ZC 0110000*	*water, distilled, conductivity or of similarpurity*	*≤100%*

· ***Dangerous components:***

CAS: 88-89-1 *EINECS: 201-865-9* *Index number: 609-009-00-X* *RTECS: TJ 7875000*	*2,4,6-trinitrophenol* *Expl. 1.1, H201; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331*	*<2.5%*
CAS: 6046-93-1 *EINECS: 205-553-3*	*Copper(II) acetate monohydrate* *Acute Tox. 4, H302*	*<2.5%*
CAS: 64-19-7 *EINECS: 200-580-7* *Index number: 607-002-00-6* *RTECS: AF 1225000* *Reg.nr.: 01-2119475328-30*	*Acetic acid glacial* *Flam. Liq. 3, H226; Skin Corr. 1A, H314* *Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 %* *Skin Corr. 1B; H314: 25 % ≤ C < 90 %* *Skin Irrit. 2; H315: 10 % ≤ C < 25 %* *Eye Irrit. 2; H319: 10 % ≤ C < 25 %*	*<2.5%*
CAS: 50-00-0 *EINECS: 200-001-8* *Index number: 605-001-00-5* *RTECS: LP 8925000* *Reg.nr.: 01-2119488953-20*	*formaldehyde..%* *Acute Tox. 3, H311; Acute Tox. 2, H330; Muta. 2, H341; Carc. 1B, H350; Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1A, H317, EUH071* *ATE: LD50 oral: 500 mg/kg* *LC50/4 h inhalative: 100 ppm* *Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %* *Skin Irrit. 2; H315: 5 % ≤ C < 25 %* *Eye Irrit. 2; H319: 5 % ≤ C < 25 %* *STOT SE 3; H335: C ≥ 5 %*	*≥0.1-<1%*
CAS: 67-56-1 *EINECS: 200-659-6* *Index number: 603-001-00-X* *RTECS: PC 1400000* *Reg.nr.: 01-2119433307-44*	*Methanol* *Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370* *Specific concentration limits: STOT SE 1; H370: C ≥ 10 %* *STOT SE 2; H371: 3 % ≤ C < 10 %*	*<0.49%*

SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:***
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· ***After inhalation:***
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air and to be sure call for a doctor.
· ***After skin contact:***
Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse.

(Contd. on page 4)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Trade name: Bouin Hollande liquid

(Contd. of page 3)

Generally the product does not irritate the skin.
If skin irritation continues, consult a doctor.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** If some symptoms persist seek for medical advice.
· **Information for doctor:** Show the doctor this Material Safety Data Sheet.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** Do not inhale gases in case or fire or combustion.
· **Additional information** Keep receptacles cool with water spray.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Ensure adequate ventilation
· **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).
Ensure adequate ventilation.
Dispose contaminated material as waste according to section 13.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
· **Information about fire - and explosion protection:**
The product is not flammable.
Keep respiratory protective device available.

(Contd. on page 5)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 4)

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:***
Store in a well-ventilated place. Keep container tightly closed.
· ***Information about storage in one common storage facility:*** *Not required*
· ***Further information about storage conditions:*** *None.*
· ***7.3 Specific end use(s)*** *No further relevant information available.*

*
SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***

· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 88-89-1 2,4,6-trinitrophenol	
IOELV	Long-term value: 0.1 mg/m³
CAS: 64-19-7 Acetic acid glacial	
IOELV	Short-term value: 50 mg/m³, 20 ppm Long-term value: 25 mg/m³, 10 ppm
CAS: 50-00-0 formaldehyde..%	
BOELV	Short-term value: 0.74 mg/m³, 0.6 ppm Long-term value: 0.37 mg/m³, 0.3 ppm Skin sens.
CAS: 67-56-1 Methanol	
IOELV	Long-term value: 260 mg/m³, 200 ppm Skin

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***
· ***Appropriate engineering controls***
Safety shower and eye bath. Mechanical exhaust required.
No further data; see section 7.
· ***Individual protection measures, such as personal protective equipment***
· ***General protective and hygienic measures:***
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Do not inhale dust / smoke / mist.
Avoid contact with the eyes and skin.
Clean skin thoroughly immediately after handling the product.
· ***Respiratory protection:***
Use suitable respiratory protective device only when aerosol or mist is formed.



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter P2
The selected respiratory protection must comply with standard EN 136/140/143/145/149.

(Contd. on page 6)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 5)

· ***Hand protection***
The selected protective gloves have to satisfy the specifications of REGULATION (EU) 2016/425 and the standard EN 374 derived from it.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

Rubber gloves
Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.
· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Rubber gloves
· ***Penetration time of glove material***
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***Eye/face protection***



Face protection

· ***Body protection:*** *Protective work clothing*
· ***Environmental exposure controls***
In case of unintended release of the product: See section 6 of the Safety Data Sheet.
· ***Risk management measures*** *Keep good industrial hygiene.*

SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***	
· ***Molecular weight***	
· ***Physical state***	*Liquid*
· ***Colour:***	*Green*
· ***Odour:***	*Acidic*

· ***Odour threshold:***

64-19-7	*Acetic acid glacial*	*24,3 ppm*

· ***Melting point/freezing point:***	*Undetermined*
· ***Boiling point or initial boiling point and boiling range***	*Undetermined*
· ***Flammability***	*Not applicable*
· ***Lower and upper explosion limit***	
· ***Lower:***	*Not determined*
· ***Upper:***	*Not determined*
· ***Flash point:***	*Not applicable*
· ***Decomposition temperature:***	*Not determined*
· ***pH at 20 °C***	*<5*
· ***Viscosity:***	
· ***Kinematic viscosity***	*Not determined*

(Contd. on page 7)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 6)

· **Dynamic:**	Not determined
· **Solubility**	
· **water:**	Not miscible or difficult to mix.
· **organic solvents:**	Miscible with many organic solvents.
· **Partition coefficient n-octanol/water (log value)**	Not determined
· **Vapour pressure at 20 °C:**	23 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1.03 g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not determined

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard. Forms very sensitive explosive metallic compounds.
· **Solvent separation test:**	
· **Organic solvents:**	2.6 %
· **Water:**	93.1 %
· **Solids content:**	4.4 %
· **Change in condition**	
· **Evaporation rate**	Not determined

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** See 10.3
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** Reacts with various metals.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** Metals

(Contd. on page 8)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 7)

· **10.6 Hazardous decomposition products:**
No decomposition products known, more dangerous than the product as such.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
CAS: 88-89-1 2,4,6-trinitrophenol		
Oral	LD50	200 mg/kg (rat)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	0.5 ppm (ATE)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Ingestion:** May be fatal if swallowed.
· **Inhalation:**
Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema.
Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
· **Respiratory or skin sensitisation** May cause an allergic skin reaction.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** May cause cancer. Route of exposure: Inhalation.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **Other information (about experimental toxicology):** No further relevant information available.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
CAS: 88-89-1 2,4,6-trinitrophenol	
EC50/48h	85 mg/l (Daphnia)
LC50/96h	130 mg/l (fishes)

· **12.2 Persistence and degradability** No further relevant information available.
· **Method**
· **Ecological information** Not available
· **Other information:** The product is biodegradable.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

(Contd. on page 9)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 8)

· ***12.6 Endocrine disrupting properties***
The product does not contain substances with endocrine disrupting properties.
· ***12.7 Other adverse effects***
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation***
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Reutilise if possible or contact a waste processors for recycling or safe disposal. 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.
· ***Waste disposal key:***
The European Union does not establish uniform rules for the disposal of chemical waste, which are special waste. Their treatment and elimination of the domestic legislation of each country. So, in each case, you should contact the relevant authorities, or those companies legally authorized for elimination of waste.
2014/955/UE: Council Decision of 18 December 2014 amending the list of wastes contained in Decision 2000/532/EC.
Directive 2008/98/EC of the european parliament and of the council of 18 November 2008, in ist latest valid version.

· ***European waste catalogue***	
HP4	*Irritant - skin irritation and eye damage*
HP7	*Carcinogenic*

· ***Uncleaned packaging:***
The containers and packaging materials contaminated with dangerous substances or preparations, have the same treatment of products.
Directive 94/62/EC of the European Parliament and the Council of 20 December 1994 on packaging and packaging waste.
· ***Recommendation:***
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· ***14.1 UN number or ID number***	
· ***ADR/RID, ADN, IMDG, IATA***	*Void*
· ***14.2 UN proper shipping name***	
· ***ADR/RID, ADN, IMDG, IATA***	*Void*
· ***14.3 Transport hazard class(es)***	
· ***ADR/RID, ADN, IMDG, IATA***	
· ***Class***	*Void*
· ***14.4 Packing group***	
· ***ADR/RID, IMDG, IATA***	*Void*

(Contd. on page 10)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

(Contd. of page 9)

· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable
· **UN "Model Regulation":**	Void

SECTION 15: Regulatory information

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

· **SARA Section 355 (extremely hazardous substances)**

CAS: 50-00-0	formaldehyde..%

· **SARA Section 313 (specific toxic chemical listings)**

CAS: 88-89-1	2,4,6-trinitrophenol
CAS: 50-00-0	formaldehyde..%
CAS: 67-56-1	Methanol

· **Prop 65 - Chemicals known to cause cancer**

CAS: 50-00-0	formaldehyde..%

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 28, 69, 72, 77

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2024/590 on substances that deplete the ozone layer**

None of the ingredients is listed.

· **National regulations:**

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.

· **Technical instructions (air):**

Class	Share in %
Wasser	50-100
I	<5
II	<2.5

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 11)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 Version number 17 (replaces version 16) Revision: 07.04.2026

Trade name: Bouin Hollande liquid

(Contd. of page 10)

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H201 Explosive; mass explosion hazard.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
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.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H370 Causes damage to organs.
H371 May cause damage to organs.
EUH071 Corrosive to the respiratory tract.

· **Training hints** Deploy only trained chemical workers.
· **Department issuing SDS:** Q.A./Normative
· **Date of previous version:** 01.04.2021
· **Version number of previous version:** 16
· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Expl. 1.1: Explosives – Division 1.1
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2

(Contd. on page 12)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 11)

Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1B: Carcinogenicity – Category 1B
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

· ***Sources***
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH, in the latest valid version.
Regulation (EC) N° 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, in the latest valid version.
Globally Harmonized System, GHS
ADR/RID, IMDG, IATA
PubChem : an open chemistry database at the National Institutes of Health (NIH)
ECHA : European CHemicals Agency
GESTIS : Information system on hazardous substances of the German Social Accident Insurance

· **** Data compared to the previous version altered.*** .

EU

(Contd. on page 13)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 12)

*
Annex: Exposure scenario

· ***Short title of the exposure scenario*** *Substance manufacturing*
· ***Sector of Use*** *Industrial use.*
· ***Product category***
PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
PC21 Laboratory chemicals
PC29 Pharmaceuticals
PC40 Extraction agents
· ***Process category***
PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
· ***Environmental release category*** *ERC1 Manufacture of the substance*
· ***Description of the activities / processes covered in the Exposure Scenario***
See section 1 of the annex to the Safety Data Sheet.
· ***Conditions of use***
According to directions for use.
Customary application according to section 1.
· ***Duration and frequency*** *5 workdays/week.*
· ***Physical parameters***
The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.
· ***Physical state***
Fluid
Fluid
· ***Concentration of the substance in the mixture*** *The substance is main component.*
· ***Used amount per time or activity*** *According to directions for use.*
· ***Other operational conditions*** *Observe the general safety regulations when handling chemicals.*
· ***Other operational conditions affecting environmental exposure***
No special measures required.
Observe section 6 of the Safety Data Sheet (Accidental release measures).
Use only on hard ground.
· ***Other operational conditions affecting worker exposure***
Avoid contact with the skin.
Avoid long-term or repeated skin contact.
Do not breathe gas/vapour/aerosol.
· ***Risk management measures***
· ***Worker protection***
· ***Organisational protective measures***
Keep good industrial hygiene.
Deploy only trained chemical workers.
Ensure that activities are executed by specialists or authorised personnel only.
No special measures required.
For special applications, it is recommended to verify the chemical resistance of the above stated protective gloves with the manufacturer.
Persons, who tend to skin diseases or other hypersensitivity reactions of the skin, should not handle the product.
Provide sufficient washing facilities.
Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
· ***Technical protective measures***
Ensure that suitable extractors are available on processing machines
Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 14)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 11.04.2026 *Version number 17 (replaces version 16)* *Revision: 07.04.2026*

Trade name: Bouin Hollande liquid

(Contd. of page 13)

· ***Personal protective measures***
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Use suitable respiratory protective device only when aerosol or mist is formed.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter P2
The selected respiratory protection must comply with standard EN 136/140/143/145/149.
The selected protective gloves have to satisfy the specifications of REGULATION (EU) 2016/425 and the standard EN 374 derived from it.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Protective gloves
Rubber gloves
Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.
Protective work clothing
Face protection
The usual precautionary measures are to be adhered to when handling chemicals.
Detailed measures on hand protection according to Safety Data Sheet, section 8.
· ***Environmental protection measures***
· ***Water***
No special measures required.
Do not allow to reach sewage system.
Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.
· ***Soil*** *Prevent contamination of soil.*
· ***Notes*** *In case of unintended release of the product: See section 6 of the Safety Data Sheet.*
· ***Disposal measures***
Disposal must be made according to official regulations.
Ensure that waste is collected and contained.
· ***Disposal procedures***
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· ***Waste type*** *Partially emptied and uncleaned packaging*
· ***Guidance for downstream users***
No further relevant information available.
Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.