

## Safety Data Sheet

according to UK REACH Regulation

### BRADFORD reagent (5x concentrate)

Revision date: 12.01.2024

Product code: 18583.xxxxx

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

##### 1.1. Product identifier

BRADFORD reagent (5x concentrate)

UFI: Y09T-5H0S-98J5-MCUA

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

###### Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

##### 1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH  
Street: Schumannstr. 142/144  
Place: D-63069 Offenbach  
Telephone: +49 (0) 69 / 400 3019-60      Telefax: +49 (0) 69 / 400 3019-64  
E-mail: info@morphisto.de  
Contact person: Morphisto GmbH  
E-mail: gefahrstoffmanagement@morphisto.de  
Internet: http://www.morphisto.de

##### 1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### GB CLP Regulation

Met. Corr. 1; H290  
Flam. Liq. 3; H226  
Acute Tox. 4; H302  
Acute Tox. 4; H332  
Skin Corr. 1B; H314  
Eye Dam. 1; H318  
STOT SE 1; H370

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### GB CLP Regulation

###### Hazard components for labelling

phosphoric acid  
methanol

Signal word: Danger

###### Pictograms:



###### Hazard statements

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H370	Causes damage to organs.

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#### Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.

#### Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



#### Hazard statements

H314-H370

#### Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338-P310

#### 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7664-38-2	phosphoric acid			55 - < 60 %
	231-633-2	015-011-00-6	01-2119485924-24	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H302 H314 H318			
67-56-1	methanol			10 - < 15 %
	200-659-6	603-001-00-X	01-2119433307-44	
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370			
6104-58-1	Coomassie Brilliant Blue G-250			< 0.1 %
	228-058-4			

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

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#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7664-38-2	231-633-2	phosphoric acid	55 - < 60 %
		dermal: LD50 = 2740 mg/kg; oral: LD50 = 1530 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Dam. 1; H318: >= 25 - 100 Eye Irrit. 2; H319: >= 10 - < 25	
67-56-1	200-659-6	methanol	10 - < 15 %
		inhalation: LC50 = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = 300 mg/kg; oral: LD50 = 100 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - < 10	
6104-58-1	228-058-4	Coomassie Brilliant Blue G-250	< 0.1 %
		oral: LD50 = >5000 mg/kg	

#### Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

##### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

##### After ingestion

Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Let water be drunken in little sips (dilution effect).

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

Causes burns. Risk of serious damage to eyes. shortage of breath. Circulatory collapse.

#### 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

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder. Co-ordinate fire-fighting measures to the fire surroundings.

##### Unsuitable extinguishing media

High power water jet.

#### 5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Phosphorpentoxide.

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**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**For non-emergency personnel**

Clear danger zone. Follow emergency plan. Consult an expert.

**For emergency responders**

Move undamaged containers from immediate hazard area if it can be done safely. Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Explosion risk. No special environmental measures are necessary. Clean contaminated articles and floor according to the environmental legislation.

**6.3. Methods and material for containment and cleaning up****For containment**

Make sure spills can be contained (e.g. sump pallets or kerbed areas). Contain leaks or spills within cabinets with removable trays. Cover drains.

**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Rinse with water. Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Use extractor hood (laboratory). Handle and open container with care. Always close containers tightly after the removal of product. Personal protection equipment: see section 8

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Vapours/aerosols should be exhausted directly at the point of origin.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Street clothing should be stored separately from work clothing. Contaminated work clothing should not be allowed out of the workplace.

**7.2. Conditions for safe storage, including any incompatibilities**

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**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Unsuitable container/equipment material: Metal. Keep only in original packaging. Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

**Hints on joint storage**

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate.

**Further information on storage conditions**

Ensure adequate ventilation. Recommended storage temperature: 15-25 °C.

**7.3. Specific end use(s)**

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
7664-38-2	phosphoric acid			
	Worker DNEL, long-term	inhalation	systemic	10,7 mg/m <sup>3</sup>
	Worker DNEL, long-term	inhalation	local	1 mg/m <sup>3</sup>
	Worker DNEL, acute	inhalation	local	2 mg/m <sup>3</sup>
67-56-1	methanol			
	Worker DNEL, acute	inhalation	local	260 mg/m <sup>3</sup>
	Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day
	Worker DNEL, acute	inhalation	systemic	260 mg/m <sup>3</sup>
	Worker DNEL, long-term	inhalation	local	260 mg/m <sup>3</sup>
	Worker DNEL, long-term	dermal	systemic	40 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	260 mg/m <sup>3</sup>

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#### PNEC values

CAS No	Substance	
Environmental compartment		Value
67-56-1	methanol	
Freshwater		20,8 mg/l
Marine water		2,08 mg/l
Marine water (intermittent releases)		1540 mg/l
Freshwater sediment		77 mg/kg
Marine sediment		7,7 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		3,18 mg/kg

#### 8.2. Exposure controls



##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation as well as local exhaustion at critical locations.

Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection: goggles. Safety goggles with side protection. In case of increased risk add protective face shield.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: Breakthrough time (maximum wearing time): >480 min.

CR (polychloroprene, chloroprene rubber) Thickness of material: 0,5mm.

NBR (Nitrile rubber) Thickness of material: 0,5mm.

Butyl caoutchouc (butyl rubber) Thickness of material: 0,5mm.

FKM (fluororubber). Thickness of material: 0,4mm.

PVC (Polyvinyl chloride). Thickness of material: 0,5mm.

##### Skin protection

Use of protective clothing. Material, acid-resistant.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Type ABEK Combination filtering device (EN 14387) Gases and vapours.

Identification color: brown/ grey/yellow/ green or

gas filtering equipment (EN 141). Type B Identification color: grey .

##### Thermal hazards

Explosive in a vapour/gaseous state with air.

##### Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	violet
Odour:	Irritant
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	64,7 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	48 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	1-2
Viscosity / kinematic:	not determined
Water solubility: (at 20 °C)	easily soluble
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	129 hPa
Vapour pressure: (at 50 °C)	123 hPa
Density:	1,23 g/cm <sup>3</sup>
Relative vapour density:	not determined
Particle characteristics:	not applicable

**9.2. Other information****Information with regard to physical hazard classes**

## Explosive properties

The product is not: Explosive.

## Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

Evaporation rate: not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Corrosive to metals. Possibility of hazardous reactions. Flammable.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Exothermic reaction with: Base, Peroxides, Oxidizing agent. Explosion risk in contact with: Alkali metals. Aluminium. Nitric acid. Sulphuric acid. Nitric oxides. Hydrogen peroxide. Barium perchlorate. Lead chlorate. Lead perchlorate. Chromosulphuric acid. Dichlorohexoxide. Magnesium powder. Sodium hypochlorite. Perchloric acid. Permanganic acid. Zinc diethyl.

Reaction with: Nitromethan. sodium borohydride.

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**10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. UV-radiation/sunlight. Protect from light.

**10.5. Incompatible materials**

Metal. Keep away from: Base, Oxidizing agent, Peroxides. Nitromethan. sodium borohydride.

**10.6. Hazardous decomposition products**

 In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Phosphorpentoxide.

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in GB CLP Regulation**
**Acute toxicity**

Harmful if swallowed.

Harmful if inhaled.

**ATEmix calculated**

ATE (oral) 557,8 mg/kg; ATE (dermal) 2098 mg/kg; ATE (inhalation vapour) 20,98 mg/l; ATE (inhalation dust/mist) 3,497 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-38-2	phosphoric acid				
	oral	LD50 mg/kg	1530	Rat	SDS external
	dermal	LD50 mg/kg	2740	Rabbit	SDS external
67-56-1	methanol				
	oral	LD50 mg/kg	100	Rat	suppliers SDS.
	dermal	LD50 mg/kg	300	Rabbit	suppliers SDS.
	inhalation (4 h) vapour	LC50	3 mg/l	Rat	suppliers SDS.
	inhalation dust/mist	ATE	0,5 mg/l		
6104-58-1	Coomassie Brilliant Blue G-250				
	oral	LD50 mg/kg	>5000	Rat	suppliers SDS.

**Irritation and corrosivity**

Causes severe skin burns and eye damage.

Causes serious eye damage.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Causes damage to organs. (methanol)

**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.

**11.2. Information on other hazards**



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#### Endocrine disrupting properties

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

#### Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7664-38-2	phosphoric acid					
	Acute fish toxicity	LC50 138 mg/l	96 h	Gambusia affinis	ECHA	
	Acute algae toxicity	ErC50 >100 mg/l	72 h	Algae	SDS external	
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Aquatic invertebrates.	SDS external	
	Acute bacteria toxicity	EC50 >1000 mg/l ( )	3 h	soil dwelling microorganisms	SDS external	
67-56-1	methanol					
	Acute fish toxicity	LC50 15400 mg/l	96 h	Lepomis macrochirus	ECHA Dossier	
	Acute algae toxicity	ErC50 22000 mg/l	96 h	Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna	ECHA Dossier	OECD 202

### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-56-1	methanol			
	other guideline	96%	20	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-56-1	methanol	-0,77
6104-58-1	Coomassie Brilliant Blue G-250	-2,55

#### BCF

CAS No	Chemical name	BCF	Species	Source
67-56-1	methanol	<10		

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

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**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Hazardous waste according to Directive 2008/98/EC (waste framework directive). The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Consult the appropriate local waste disposal expert about waste disposal.

**List of Wastes Code - residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**List of Wastes Code - used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Contaminated packaging**

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself. Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number or ID number:**

UN 2924

**14.2. UN proper shipping name:**

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Methanol, Phosphorsäure)

**14.3. Transport hazard class(es):**

3

**14.4. Packing group:**

III

Hazard label:

3+8



Classification code:

FC

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

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Tunnel restriction code: D/E

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 2924  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Methanol, Phosphorsäure)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3+8



Classification code: FC  
 Special Provisions: 274  
 Limited quantity: 5 L  
 Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 2924  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, phosphoric acid)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3+8



Special Provisions: 223 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-E, S-C

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 2924  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, phosphoric acid)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3+8



Special Provisions: A3 A803  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y342  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 354  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 365  
 IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Combustible liquid. strongly corrosive.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

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#### SECTION 15: Regulatory information

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

###### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to Directive  
2012/18/EU (SEVESO III):

H3 STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Additional information:

P5c

###### Additional information

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

###### National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

2 - obviously hazardous to water

###### Additional information

The product is subject to the Chemicals Prohibition Ordinance (ChemVerbotsV). Observe the requirements and restrictions for handling and dispensing in Section 3 of the ChemVerbotsV, among others.

##### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

phosphoric acid

methanol

#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s):

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Rev. 1,0; 04.06.2021; New generation for the purpose of customer order.

Rev. 2,0; 12.01.2024; Change of classification/labeling, Change of transport labelling

**Safety Data Sheet**

according to UK REACH Regulation

**BRADFORD reagent (5x concentrate)**

Revision date: 12.01.2024

Product code: 18583.xxxxx

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**Abbreviations and acronyms**

Met. Corr: Corrosive to metals  
Flam. Liq: Flammable liquids  
Acute Tox: Acute toxicity  
Skin Corr: Skin corrosion  
Eye Dam: Eye damage  
STOT SE: Specific target organ toxicity - single exposure  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
CAS: Chemical Abstracts Service  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
IMDG: International Maritime Code for Dangerous Goods  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>  
EC/EEC: European Community/European Economic Community  
EU: European Union  
M-factor: Multiplying factor  
IATA: International Air Transport Association  
DGR: Dangerous Goods Regulations  
ICAO: International Civil Aviation Organization  
TI: Technical Instructions  
VOC: volatile organic compound  
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 1; H370	Calculation method

**Relevant H and EUH statements (number and full text)**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H370	Causes damage to organs.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*