

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 11-Mar-2010 Revision Date 09-Feb-2024 Revision Number 8

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: Benzylmagnesium chloride, 1.4M solution in THF

Cat No.: 389550000; 389551000; 389558000

Molecular Formula C7 H7 Cl Mg

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

EU entity/business name

Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

**Physical hazards** 

Flammable liquids Category 2 (H225)

**Health hazards** 

Skin Corrosion/Irritation Category 1 B (H314)
Serious Eye Damage/Eye Irritation Category 1 (H318)

#### Benzylmagnesium chloride, 1.4M solution in THF

Revision Date 09-Feb-2024

Carcinogenicity

Specific target organ toxicity - (single exposure)

Category 2 (H351) Category 3 (H335) (H336)

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



#### Signal Word

## **Danger**

#### **Hazard Statements**

H225 - Highly flammable liquid and vapor

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

EUH014 - Reacts violently with water

EUH019 - May form explosive peroxides

## **Precautionary Statements**

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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 or doctor/physician

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

## 2.3. Other hazards

Not applicable

Reacts violently with water

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Magnesium, chloro(phenylmethyl)-	6921-34-2	EEC No. 230-039-0	21	Skin Corr. 1B (H314) (EUH014)
Tetrahydrofuran	109-99-9	203-726-8	79	Flam. Liq. 2 (H225) Acute Tox. 4 (H302)

#### Benzylmagnesium chloride, 1.4M solution in THF

	Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT SE 3 (H336)
	Carc. 2 (H351) (EUH019)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Tetrahydrofuran	Acute Tox. 4 :: C>82.5%	<del>-</del>	-
	Eye Irrit. 2 :: C>=25%		
	STOT SE 3 :: C>=25%		

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

Revision Date 09-Feb-2024

immediately.

Ingestion Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Inhalation If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use

> mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Call a physician immediately.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system

depression

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

**Notes to Physician** Treat symptomatically. Symptoms may be delayed.

## **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers.

#### Benzylmagnesium chloride, 1.4M solution in THF

Revision Date 09-Feb-2024

Extinguishing media which must not be used for safety reasons Water.

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

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Reacts violently with water. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas.

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharges.

#### 6.2. Environmental precautions

Should not be released into the environment.

#### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Do not expose spill to water. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water. If peroxide formation is suspected, do not open or move container. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Keep away from water or moist air. Store indoors. Protect from direct sunlight. Keep under nitrogen. Shelf life 12 months. May form explosive peroxides on prolonged storage. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. Corrosives area.

Storage Class (LGK) (Germany)

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

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Tetrahydrofuran	STEL: 100 ppm 15 min	TWA: 50 ppm (8h)	TWA: 50 ppm 8 hr.
	STEL: 300 mg/m <sup>3</sup> 15 min	TWA: 150 mg/m <sup>3</sup> (8h)	TWA: 150 mg/m <sup>3</sup> 8 hr.
	TWA: 50 ppm 8 hr	STEL: 100 ppm (15min)	STEL: 100 ppm 15 min
	TWA: 150 mg/m <sup>3</sup> 8 hr	STEL: 300 mg/m <sup>3</sup> (15min)	STEL: 300 mg/m <sup>3</sup> 15 min
	Skin	Skin	Skin

#### **Biological limit values**

List source(s):

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Tetrahydrofuran 109-99-9 ( 79 )				DNEL = 12.6mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Tetrahydrofuran 109-99-9 ( 79 )	DNEL = 300mg/m <sup>3</sup>	DNEL = 96mg/m <sup>3</sup>	DNEL = 150mg/m <sup>3</sup>	DNEL = 72.4mg/m <sup>3</sup>

#### **Predicted No Effect Concentration (PNEC)**

See values below.

	Component	Fresh water		Water Intermittent	Microorganisms in	Soil (Agriculture)
L			sediment		sewage treatment	
ſ	Tetrahydrofuran	PNEC = 4.32mg/L	PNEC = 23.3 mg/kg	PNEC = 21.6mg/L	PNEC = 4.6mg/L	PNEC = 2.13mg/kg
	109-99-9 ( 79 )	_	sediment dw	-		soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Tetrahydrofuran	PNEC = 0.432mg/L	PNEC = 2.33mg/kg		PNEC = 67mg/kg	
109-99-9 ( 79 )		sediment dw		food	

#### 8.2. Exposure controls

#### **Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use

#### Benzylmagnesium chloride, 1.4M solution in THF

explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)
Neoprene gloves				

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

Revision Date 09-Feb-2024

and maintained properly

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits Large scale/emergency use

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: low boiling organic solvent Type AX Brown conforming to EN371 or Organic gases and vapours filter Type A Brown conforming to EN14387

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure Small scale/Laboratory use

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

Liquid

When RPE is used a face piece Fit Test should be conducted

No information available. **Environmental exposure controls** 

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

Liquid **Physical State** 

Dark yellow **Appearance** Odor Odorless

**Odor Threshold** No data available Melting Point/Range No data available **Softening Point** No data available No information available **Boiling Point/Range** 

Highly flammable Flammability (liquid) On basis of test data

Not applicable Flammability (solid,gas) No data available

**Explosion Limits** 

**Flash Point** -17 °C / 1.4 °F Method - (based on components)

**Autoignition Temperature** No data available **Decomposition Temperature** No data available No information available

No data available Viscosity

Water Solubility Reacts violently with water

Benzylmagnesium chloride, 1.4M solution in THF

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Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowTetrahydrofuran0.45

Vapor Pressure No data available

Density / Specific Gravity 1.000

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Molecular Formula C7 H7 Cl Mg Molecular Weight 150.89

**Explosive Properties** Vapors may form explosive mixtures with air

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity ; Yes Reacts violently with water

10.2. Chemical stability

Reacts violently with water. Moisture sensitive. Sensitive to air. May form explosive

Revision Date 09-Feb-2024

peroxides.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing. Reacts violently with water.

10.4. Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water. Exposure to air. Exposure to moisture.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride gas.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

#### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tetrahydrofuran	1650 mg/kg ( Rat )	> 2000 mg/kg (Rabbit)	180 mg/L (Rat)1 h
			53.9 mg/L (Rat) 4 h

(b) skin corrosion/irritation; Category 1 B

Benzylmagnesium chloride, 1.4M solution in THF

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

**Respiratory**Skin
No data available
No data available

Component	Test method	Test species	Study result
Tetrahydrofuran	Local Lymph Node Assay	mouse	non-sensitising
109-99-9 ( 79 )	OECD Test Guideline 429		-

(e) germ cell mutagenicity; No data available

Component	Test method	Test species	Study result
Tetrahydrofuran	OECD Test Guideline 476	in vivo	negative
109-99-9 ( 79 )	Gene cell mutation	Mammalian	
	OECD Test Guideline 473		
	Chromosomal aberration assay	in vitro	negative
		Mammalian	

(f) carcinogenicity; Category 2

The table below indicates whether each agency has listed any ingredient as a carcinogen

Revision Date 09-Feb-2024

Limited evidence of a carcinogenic effect

Component	EU	UK	Germany	IARC
Tetrahydrofuran				Group 2B

(g) reproductive toxicity; No data available

Component		Component	Test method	Test species / Duration	Study result	
		Tetrahydrofuran	OECD Test Guideline 416	Rat	NOAEL = 3,000 ppm	
		109-99-9 ( 79 )		2 Generation		

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system, Central nervous system (CNS).

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

delayed

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Inhalation

of high vapor concentrations may cause symptoms like headache, dizziness, tiredness,

nausea and vomiting. Causes central nervous system depression.

#### 11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

## **SECTION 12: ECOLOGICAL INFORMATION**

#### Benzylmagnesium chloride, 1.4M solution in THF

Revision Date 09-Feb-2024

12.1. Toxicity

**Ecotoxicity effects**Do not empty into drains. Reacts with water so no ecotoxicity data for the substance is

available.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Tetrahydrofuran	2160 mg/l LC50 = 96 h	EC50 48 h 3485 mg/l	
	Pimephales promelas	EC50: >10000 mg/L/24h	
	Leuciscus idus: LC50: 2820	_	
	mg/L/48h		

12.2. Persistence and degradability No information available

Persistence Persistence is unlikely, based on information available.

**Degradability** No information available, Reacts with water.

Degradation in sewage

treatment plant

No information available. Reacts violently with water.

12.3. Bioaccumulative potential Bioaccumulation is unlikely; Product does not bioaccumulate due to reaction with water

Component	log Pow	Bioconcentration factor (BCF)
Tetrahydrofuran	0.45	No data available

12.4. Mobility in soil Reacts violently with water . Is not likely mobile in the environment.

12.5. Results of PBT and vPvB

assessment

Not applicable. Reacts violently with water.

12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** 

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Tetrahydrofuran	Group III Chemical	

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** 

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

**European Waste Catalogue (EWC)** 

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Large amounts will affect pH

and harm aquatic organisms.

Revision Date 09-Feb-2024

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

**14.1. UN number** UN2924

**14.2. UN proper shipping name** Flammable liquid, corrosive, n.o.s.

Technical Shipping Name Tetrahydrofuran, Magnesium, chloro(phenylmethyl)-

14.3. Transport hazard class(es)3Subsidiary Hazard Class814.4. Packing groupII

ADR

**14.1. UN number** UN2924

**14.2. UN proper shipping name** Flammable liquid, corrosive, n.o.s.

Technical Shipping Name Tetrahydrofuran, Magnesium, chloro(phenylmethyl)-

14.3. Transport hazard class(es)3Subsidiary Hazard Class814.4. Packing groupII

<u>IATA</u>

**14.1. UN number** UN2924

**14.2. UN proper shipping name** Flammable liquid, corrosive, n.o.s.

Technical Shipping Name Tetrahydrofuran, Magnesium, chloro(phenylmethyl)-

14.3. Transport hazard class(es)3Subsidiary Hazard Class814.4. Packing groupII

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required.

<u>14.7. Maritime transport in bulk</u> Not applicable, packaged goods <u>according to IMO instruments</u>

## **SECTION 15: REGULATORY INFORMATION**

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

#### **International Inventories**

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Magnesium, chloro(phenylmethyl)-	6921-34-2	230-039-0	-	-	-	X	-	-	Х
Tetrahydrofuran	109-99-9	203-726-8	ı	ı	X	X	KE-33454	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Magnesium, chloro(phenylmethyl)-	6921-34-2	X	ACTIVE	-	X	-	X	-
Tetrahydrofuran	109-99-9	X	ACTIVE	Х	-	X	Х	Х

**Legend:** X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Revision Date 09-Feb-2024

#### Benzylmagnesium chloride, 1.4M solution in THF

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Magnesium, chloro(phenylmethyl)-	6921-34-2	-	-	-
Tetrahydrofuran	109-99-9	-	Use restricted. See item 75. (see link for restriction details)	-

#### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

#### Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report
		Notification	Requirements
Magnesium, chloro(phenylmethyl)-	6921-34-2	Not applicable	Not applicable
Tetrahydrofuran	109-99-9	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

## **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

#### WGK Classification

Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Magnesium,	WGK2	
chloro(phenylmethyl)-		
Tetrahydrofuran	WGK1	

Component	France - INRS (Tables of occupational diseases)
Tetrahydrofuran	Tableaux des maladies professionnelles (TMP) - RG 84

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Magnesium, chloro(phenylmethyl)- 6921-34-2 ( 21 )	Prohibited and Restricted Substances		
Tetrahydrofuran 109-99-9 ( 79 )		Group I	

#### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## **SECTION 16: OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

EUH014 - Reacts violently with water

EUH019 - May form explosive peroxides

H225 - Highly flammable liquid and vapor

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Substances List

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

On basis of test data Physical hazards **Health Hazards** Calculation method **Environmental hazards** Calculation method

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts. Chemical incident response training.

**Creation Date** 11-Mar-2010 **Revision Date** 09-Feb-2024 **Revision Summary** Not applicable.

Benzylmagnesium chloride, 1.4M solution in THF

Revision Date 09-Feb-2024

## amended.

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#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# **End of Safety Data Sheet**