INEOS Oxide

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878



INEOX PEG400 POLYGLYCOL 400

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

1.1. Product identifier

Product name : INFOX PFG400

Synonyms : PEG400PH; PEG400ST; PEG400XLA; polyethylene glycol 400; polyethylene glycols

Registration number REACH : Not applicable

Exempted from registration under REACH (Regulation (EC) No 1907/2006, article 2 (9), polymers)

Product type REACH : Polymer **CAS** number : 25322-68-3 **Molecular mass** : 400.00 g/mol : H(C2H4O)nHO **Formula**

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

1.2.1 Relevant identified uses

Solvent

Chemical intermediate

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

INEOS N.V.

Haven 1053 - Nieuwe Weg 1

B-2070 Zwijndrecht

2 +32 3 250 91 11

4 +32 3 252 84 33

reach.oxide.be@ineos.com

Manufacturer of the product

INEOS N.V.

Haven 1053 - Nieuwe Weg 1

B-2070 Zwiindrecht

2 +32 3 250 91 11

4 +32 3 252 84 33

INEOS Derivatives Lavera SAS

Avenue de la bienfaisance BP6

FR-13117 Lavera **2** +33 4 42 35 80 00

1.4. Emergency telephone number

24h/24h:

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

REACH Registration No	CAS No EC No List No	Conc. (C)	Classification according to CLP	Note		M-factors and ATE
polyethylene glycol	25322-68-3	100%		(2)	Polymer	

(2) Substance with a Community workplace exposure limit

Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be

© BIG vzw

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4

Revision number: 0300 BIG number: 50732

Publication date: 2000-12-10 Date of revision: 2023-12-01

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, consult a doctor/medical service.

After inhalation

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

After eve contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

After skin contact:

No effects known.

After eye contact:

Redness of the eye tissue.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.

6.3. Methods and material for containment and cleaning up

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10

Date of revision: 2023-12-01

Revision number: 0300 BIG number: 50732 2 / 8

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Product is stable up to temperature of 250°C. Product will decompose at higher temperatures. Decomposition of product will induce a significant increase of pressure and temperature. Therefore the decomposition temperature of the product should be tested first if product can/will be heated > 250°C. Observe normal hygiene standards. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a dry area. May be stored under nitrogen.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids, (strong) bases, moisture.

7.2.3 Suitable packaging material:

Stainless steel, carbon steel.

7.2.4 Non suitable packaging material:

Copper.

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

If applicable and available it will be listed below.

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Product is stable up to temperature of 250°C. Product will decompose at higher temperatures. Decomposition of product will induce a significant increase of pressure and temperature. Therefore the decomposition temperature of the product should be tested first if product can/will be heated > 250°C. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

c) Eye protection:

Eye protection not required in normal conditions.

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2. 6.3 and 13

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10 Date of revision: 2023-12-01

Revision number: 0300 BIG number: 50732 3 / 8

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Colour	Colourless
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	4 °C - 8 °C
Boiling point	No data available in the literature
Flammability	Not classified as flammable
Explosion limits	No data available in the literature
Flash point	200 °C
Auto-ignition temperature	> 360 °C
Decomposition temperature	> 250 °C
рН	4.5 - 7.0 ; 5 %
Kinematic viscosity	Not determined
Solubility	Water ; complete
Log Kow	-0.7 ; Experimental value ; Equivalent to OECD 107 ; 30 °C
Vapour pressure	< 0.01 hPa ; 20 °C
Absolute density	1126 kg/m³
Relative density	1.126
Relative vapour density	>1
Particle size	Not applicable (liquid)

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with (strong) oxidizers. Reacts with (some) acids.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Product is stable up to temperature of 250°C. Product will decompose at higher temperatures. Decomposition of product will induce a significant increase of pressure and temperature. Therefore the decomposition temperature of the product should be tested first if product can/will be heated > 250°C.

10.5. Incompatible materials

Oxidizing agents, (strong) acids, (strong) bases, moisture.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

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

11.1.1 Test results

Acute toxicity

INEOX PEG400

No (test)data available

polyethylene glycol

Route of exposure	Parameter	Method	Value	Exposure time		Value determination	Remark
Oral	LD50		> 15000 mg/kg		Rat	determination	
Dermal	LD50		> 20000 mg/kg				

Conclusion

Not classified for acute toxicity

Corrosion/irritation

INEOX PEG400

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10

Revision number: 0300 BIG number: 50732 4 / 8

Date of revision: 2023-12-01

No (test)data available

Conclusion

Not classified as irritating to the respiratory system

Not classified as irritating to the skin

Not classified as irritating to the eyes

Respiratory or skin sensitisation

INEOX PEG400

No (test)data available

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

INEOX PEG400

No (test)data available

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

INEOX PEG400

No (test)data available

Mutagenicity (in vivo)

INEOX PEG400

No (test)data available

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

INEOX PEG400

No (test)data available

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

INEOX PEG400

No (test)data available

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

INEOX PEG400

Not classified for aspiration toxicity

Toxicity other effects

INEOX PEG400

No (test)data available

Chronic effects from short and long-term exposure

INEOX PEG400

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

INEOX PEG400

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt	Value determination
							water	
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h		Static system		Experimental value; Nominal concentration

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10 Date of revision: 2023-12-01

Revision number: 0300 BIG number: 50732 5 / 8

Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system		Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l		Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Nominal
								concentration

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

INEOX PEG400

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	75 %; Oxygen consumption	28 day(s)	Experimental value

Conclusion

Water

Readily biodegradable in water

12.3. Bioaccumulative potential

INEOX PEG400

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		-0.7	30 °C	Experimental value

Conclusion

Not bioaccumulative

12.4. Mobility in soil

INEOX PEG400

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	1.9	Experimental value

Conclusion

Highly mobile in soil

12.5. Results of PBT and vPvB assessment

Substance does not meet the criteria of PBT, nor the criteria of vPvB according to Annex XIII of Regulation (EC) No 1907/2006, so is neither PBT nor vPvB.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

INEOX PEG400

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

07 01 99 (wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals: wastes not otherwise specified). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 04 (metallic packaging)

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10 Date of revision: 2023-12-01

Revision number: 0300 BIG number: 50732 6/8

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.	1. UN number/ID number	
	Transport	Not subject
14.	2. UN proper shipping name	
14.	3. Transport hazard class(es)	
	Hazard identification number	
	Class	
	Classification code	
14.	4. Packing group	
	Packing group	
	Labels	
14.	5. Environmental hazards	
	Environmentally hazardous substance mark	no
14.	6. Special precautions for user	
	Special provisions	
	Limited quantities	
14.	7. Maritime transport in bulk according to IMO instruments	
	Anney II of MARPOL 73/78	Not applicable, based on available data

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

VOC content	Remark
0 %	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

National legislation United Kingdom

No data available

Other relevant data

No data available

15.2. Chemical safety assessment

No chemical safety assessment is required.

SECTION 16: Other information

(*) INTERNAL CLASSIFICATION BY B

ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate
BCF Bioconcentration Factor
BEI Biological Exposure Indices

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC10 Effect Concentration 10 %
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

GLP Good Laboratory Practice
LC0 Lethal Concentration 0 %
LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

LOAEC/LOAEL Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level

NOAEC/NOAEL No Observed Adverse Effect Concentration/No Observed Adverse Effect Level

NOEC/NOEL No Observed Effect Concentration/No Observed Effect Level
OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative & Toxic
PNEC Predicted No Effect Concentration
STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from

Reason for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4 Publication date: 2000-12-10 Date of revision: 2023-12-01

Revision number: 0300 BIG number: 50732 7 / 8

	time to time. Only the most recent versions may be used. Unless indicated otherwise we does not apply to substances/preparations/mixtures in purer form, mixed with other sul no quality specification for the substances/preparations/mixtures in question. Complian not release the user from the obligation to take all measures dictated by common sense necessary and/or useful based on the real applicable circumstances. BIG does not guara information provided and cannot be held liable for any changes by third parties. This saf Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at subject to the licence and liability limiting conditions as stated in your BIG licence agree BIG. All intellectual property rights to this sheet are the property of BIG and its distribution.	bstances or in processes. The safety data sheet offers ce with the instructions in this safety data sheet does e, regulations and recommendations or which are antee the accuracy or exhaustiveness of the ety data sheet is only to be used within the European your own risk. Use of this safety data sheet is the ment or when this is failing the general conditions of
	mentioned agreement/conditions for details.	
Reason	of for revision: 2.3; 6; 7.1; 8.2; 9.1; 10.4	ublication date: 2000-12-10
TC USUIT	1 101 1CV101011. 2.0, 0, 1.1, U.2, J.1, 1U.7	abilitation date. 2000 12 10

Revision number: 0300 BIG number: 50732 8 / 8

Date of revision: 2023-12-01