

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 11/5/2021 Revision date: 12/5/2023 Supersedes version of: 8/31/2023 Version: 3.1

1.1. Product identifier	
Product form Trade name UFI Product code Type of product Synonyms Product group	 Mixture Phenoxyacetic Anhydride and Pyridine in Tetrahydrofuran JKT2-E0T1-U00Q-JMH6 NC-0707 Synthesis Reagent CAP A Ultramild End product
1.2. Relevant identified uses of the s	substance or mixture and uses advised against
 1.2.1. Relevant identified uses Main use category Industrial/Professional use spec Use of the substance/mixture Function or use category 1.2.2. Uses advised against No additional information available 	 Professional use,Laboratory chemical Industrial For professional use only Laboratory chemicals Substance manufacture Laboratory chemicals
1.3. Details of the supplier of the saf	ety data sheet
emp Biotech GmbH GmbH Robert-Rössle-Str. 10 DE 13125 Berlin Deutschland T +49 (0)30 94 89 22 01 (Monday-Friday, 9: info@empbiotech.com, www.empbiotech.co	
1.4. Emergency telephone number	
Emergency number	: Giftnotruf Berlin +49 30 30686700 (Beratung in Deutsch), 24 Stunden, 7 Tage/Woche; International: INFOTRAC +1-352-323-3500 (Phone) or in the US 800-535-5053 (toll-free), 24 hours/day, 7 days/week

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2	H225		
Skin Irrit. 2	H315		
Eye Irrit. 2	H319		
Carc. 2	H351		
STOT SE 3	H335		
Full text of hazard classes. H- and EUH-statements: see section 16			

Adverse physicochemical, human health and environmental effects

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS02 GHS07 GHS08 Signal word (CLP) : Danger Hazard statements (CLP) : H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H351 - Suspected of causing cancer. Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 - Ground and bond container and receiving equipment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, hearing protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. **EUH-statements** EUH019 - May form explosive peroxides. 2.3. Other hazards Other hazards which do not result in classification : This substance / mixture does not contain any components of 0.1% or higher that are either classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetrahydrofuran substance with national workplace exposure limit(s) (DE); substance with a Community workplace exposure limit	CAS-No.: 109-99-9 EC-No.: 203-726-8 EC Index-No.: 603-025-00-0 REACH-no: 01-2119444314- 46-XXXX	75 – 95	Flam. Liq. 2, H225 Carc. 2, H351 Eye Irrit. 2, H319 STOT SE 3, H335
Pyridine (anhydrous) substance with national workplace exposure limit(s) (DE)	CAS-No.: 110-86-1 EC-No.: 203-809-9 EC Index-No.: 613-002-00-7 REACH-no: 01-2119493105- 40-XXXX	5 – 20	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phenoxyacetic Anhydride	CAS-No.: 14316-61-1 EC-No.: 627-222-6	3 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Specific concentration limits:			
Name	Product identifier	Specific concentration limits (%)	
Tetrahydrofuran	CAS-No.: 109-99-9 EC-No.: 203-726-8 EC Index-No.: 603-025-00-0 REACH-no: 01-2119444314- 46-XXXX	(25 ≤ C < 100) STOT SE 3, H335 (25 ≤ C < 100) Eye Irrit. 2, H319	

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

SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures general First-aid measures after inhalation	 Consult a doctor. Show this safety data sheet to the doctor in attendance. Call a physician immediately. If breathing stops: immediately apply artificial respiration, if necessary also oxygen. Move person to fresh air and ensure comfortable breathing. 		
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Rinse skin with water/shower. Ask for medical advice.		
First-aid measures after eye contact	: Get immediate medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing.		
First-aid measures after ingestion	: Do not induce vomiting. Drink water immediatly (max. 2 cups). Do not give an unconscious person anything to drink. Ask for medical advice.		
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms/effects	: The most important known symptoms and effects are described on the label (see 2.2) and / or in section 11.		

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

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Foam. Carbon dioxide. Dry powder. Water spray.		
5.2. Special hazards arising from the subst	ance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Combustible. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. Nitrogen oxides. In case of fire: hazardous combustion gases or vapors possible. Be careful, the product may re-ignite. 		
5.3. Advice for firefighters			
Protection during firefighting Other information	 Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Use water spray to cool unopened containers. 		

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective	e equipment and emergency procedures		
6.1.1. For non-emergency personnel			
Protective equipment Emergency procedures	 For personal protection see section 8. Avoid breathing vapours, mist, gas, spray. Avoid substance contact. Ensure adequate ventilation, observe emergency procedures, consult an expert. Keep away from heat and sources of ignition. 		
6.1.2. For emergency responders			
Protective equipment	: Wear recommended personal protective equipment.		
6.2. Environmental precautions			
Do not allow to enter drains or water courses	s. Avoid release to the environment. Prevent further leakage or spillage if safe to do so.		
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up	 Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area. 		

6.4. Reference to other sections

Information on exposure controls/personal protective equipment and on Instructions for disposal can be found in sections 8 and 13.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	 Use under laboratory hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Wash hands and other exposed areas with mild soap and water before eating, drinking or 	
	smoking and when leaving work. Remove contaminated clothes.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	Keep container tightly closed in a dry, well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Keep contents under inert gas. Dry residue is explosive. Test for peroxide formation periodically and before distillation.	
Storage temperature	: 5 – 20 °C	
Storage area	: Storage class (TRGS 510): See section 15.1.2.	
7.3. Specific end use(s)		

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Tetrahydrofuran (109-99-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Tetrahydrofuran
IOEL TWA	150 mg/m³
	50 ppm

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Tetrahydrofuran (109-99-9)	
IOEL STEL	300 mg/m ³
	100 ppm
Remark	Skin
Germany - Occupational Exposure Limits (TRGS 900)
Local name	Tetrahydrofuran
AGW (OEL TWA)	150 mg/m³
	50 ppm
Remark	DFG,EU,H,Y
Germany - Biological limit values (TRGS 90	3)
Local name	Tetrahydrofuran
Biological limit value	2 mg/l Urine Remarks: End of exposure or end of shift.
Pyridine (anhydrous) (110-86-1)	
Germany - Occupational Exposure Limits (TRGS 900)
Local name	Pyridin
AGW (OEL TWA)	15 mg/m³
	5 ppm - Remarks: Indicative Legal reference: Commission Directive 91/322/EEC on release of indicative limit values
Phenoxyacetic Anhydride (14316-61-1)	
Germany - Occupational Exposure Limits (Generic OEL data)
	Contains no substances with occupational exposure limits

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection. Safety glasses. EN 166. Use face shield for larger quantities.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.2. Skin protection

Skin and body protection:

Wear protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Flame retardant antistatic protective clothing

Hand protection:

Wear protective gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

. Splash contact-material: butyl-rubber

Minimum layer thickness: 0,7 mm

Break through time: 10 min

8.2.2.3. Respiratory protection

Respiratory protection:

Wear respiratory protection. Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not let product enter drains. Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Light yellow to yellow to brown.
Appearance	: Clear.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: 1.5 vol % (THF)
Upper explosion limit	: 12.4 vol % (THF)
Flash point	: -21.5 °C Method: c.c. (THF)
Auto-ignition temperature	: 215 °C Method: DIN 51794 (THF)
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors can form an explosive mixture with air. Peroxides may be formed.

10.2. Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3. Possibility of hazardous reactions

The constituents may react with: Water Fluorine Halogen-halogen compounds Chlorosulfonic acid Chromium(VI) oxide Fuming sulfuric acid Perchromates Nitric acid Sulphuric acid Silver salt Perchlorates Nitrogen dioxide Hydrogen peroxide Potassium permanganate Perchloric acid Nitrogen oxides Acid halides

A risk of explosion and/or of toxic gas formation exists with the following substances: Oxygen Alkali hydroxides Hydrides Oxidizing agents Bromine Ammonia Nitrates.

10.4. Conditions to avoid

High temperature. Heat. Direct sunlight. Open flame. Sparks.

10.5. Incompatible materials

Several plastics. Rubber. Several metals.

10.6. Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11: Toxicological ir	nformation	
11.1. Information on hazard clas	ses as defined in Regulation (EC) No 1272/2008	
Aquita taviaity (aral)	. Not clossified	

Acute toxicity (oral)	
Acute toxicity (dermal)	
Acute toxicity (inhalation)	

- Not classifiedNot classified
- : Not classified

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended	by Regulation (EU) 2020/878
	Tetrahydrofuran: LD50 Oral: Rat - male and female: 1.650 mg/kg Remarks: (ECHA) Symptoms: Irritation of mucous membranes LC50 Inhalation: Rat - male and female: 4 h: > 16,9 mg/l Remarks: (US-EPA) Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract LD50 Dermal: Rat - male and female: > 2.000 mg/kg Remarks: (OECD Test Guideline 402) Pyridine: LD50 Oral - Rat: 1.500 mg/kg Remarks: (ECHA) Symptoms: Vomiting, Nausea LC50 Inhalation - Rat - male - 4 h: 17,1 mg/l Remarks: (US-EPA) Symptoms: mucosal irritations, Cough, Shortness of breath LD50 Dermal - Rabbit: > 1.000 - 2.000 mg/kg Pemarks: (OECD Test Guideline 402)
Tetrahydrofuran (109-99-9)	Remarks: (OECD Test Guideline 402)
	1650 mg//gCAE Metazial Safaty Data Shaat
LD50 oral rat	1650 mg/kg - GAF Material Safety Data Sheet.
Pyridine (anhydrous) (110-86-1)	
LD50 oral rat	891 mg/kg BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets. Vol. 14-4/1970.
LD50 dermal rabbit	1120 mg/kg BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets. Vol. 14-4/1970.
	Causes skin irritation. Pyridine: Skin - Rabbit Result: Mild skin irritation - 24 h (Draize Test)
Tetrahydrofuran (109-99-9)	
рН	7 – 8 at 20 °C; 200 g/l
Pyridine (anhydrous) (110-86-1)	
рН	≈ 8.5 at 25 °C
, .	Causes serious eye irritation. Tetrahydrofuran: Eyes - Rabbit Result: Eye irritation Remarks: (ECHA) (Regulation (EC) No 1272/2008, Annex VI) Pyridine: Eyes - Rabbit Result: Irritating to eyes 24 h Remarks: (ECHA)

Tetrahydrofuran (109-99-9)	
рН	7 – 8 at 20 °C; 200 g/l
Pyridine (anhydrous) (110-86-1)	
pН	≈ 8.5 at 25 °C
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Additional information	: Tetrahydrofuran: Suspected of causing cancer.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Pyridine (anhydrous) (110-86-1)	
IARC group	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Additional information	: Tetrahydrofuran:
	Inhalation: May cause respiratory irritation Respiratory system May cause drowsiness or dizziness Nervous system
	Acute oral toxicity: Irritation of mucous membranes
	Acute inhalation toxicity: mucosal irritations, Cough, Shortness of breath
	Possible damages: damage of respiratory tract
	Pyridine:
	Acute oral toxicity: Vomiting, Nausea
	Acute inhalation toxicity: mucosal irritations, Cough, Shortness of breath
STOT-repeated exposure Aspiration hazard	: Not classified : Not classified
•	
Tetrahydrofuran (109-99-9)	
Viscosity, kinematic	0.539 mm²/s
Pyridine (anhydrous) (110-86-1)	
Viscosity, kinematic	≈ 0.898 mm²/s
11.2. Information on other hazards	
11.2.1. Endocrine disrupting properties	
No additional information available	
11.2.2. Other information	
Potential adverse human health effects and	: Central nervous system depression, Cough, Chest pain, Difficulty in breathing. Exposure to
symptoms	high airborne concentrations can cause anesthetic effects,Other dangerous properties can
	not be excluded.
	Handle in accordance with good industrial hygiene and safety practice, The substance
Other information	should be handled with special care. To the best of our knowledge, the chemical, physical, and toxicological properties have not
	been thoroughly investigated.

SECTION 12: Ecological information	
12.1. Toxicity	
(acute)	Not classified
Tetrahydrofuran (109-99-9)	
LC50 - Fish [1]	2160 mg/l Flow-through test LC50 - Pimephales promelas (fathead minnow) - 96 h (OECD Test Guideline 203)
EC50 - Other aquatic organisms [1]	3485 mg/l Static test EC50 - Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)
Pyridine (anhydrous) (110-86-1)	
LC50 - Fish [1]	 6.3 (1.1 – 106) mg/l Reference for median: Wan, M.T., D.J. Moul, and R.G. Watts 1987. Acute Toxicity to Juvenile Pacific Salmonids of Garlon 3A, Garlon 4, Triclopyr, Triclopyr Ester, and Their Transformation Products: 3,5,6-Trichloro-2 Pyridinol and 2-Methoxy-3,5,6-Trichloropyridine. Bull.Environ.Contam.Toxicol. 39(4):721-728 (OECDG Data File)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Pyridine (anhydrous) (110-86-1)	
EC50 - Crustacea [1]	1130 (182 – 2550) mg/l Reference for median: Canton, J.H., and D.M.M. Adema 1978. Reproducibility of Short-Term and Reproduction Toxicity Experiments with Daphnia magna and Comparison of the Sensitivity of Daphnia magna with Daphnia pulex and Daphnia cucullata in Short-Term Experiments. Hydrobiologia 59(2):135-140 (Used Reference 2018)
EC50 96h - Algae [1]	110 mg/l Reference for median: Slooff, W. 1982. A Comparative Study on the Short-Term Effects of 15 Chemicals on Fresh Water Organisms of Different Tropic Levels. Natl.Tech.Inf.Serv., Springfield, VA :25 p. (DUT) (ENG ABS) (NTIS/PB83-200386)

12.2. Persistence and degradability

Phenoxyacetic Anhydride and Pyridine in Tetrahydrofuran		
Persistence and degradability	Rapidly degradable	
Tetrahydrofuran (109-99-9)		
Persistence and degradability	Rapidly degradable	
Biodegradation	39 % Biodegradability aerobic Biochemical oxygen demand Exposure time 28 d Result: Not readily biodegradable. (OECD Test Guideline 301D)	
Pyridine (anhydrous) (110-86-1)		
Persistence and degradability	Rapidly degradable	
Biodegradation	97 % Aerobic - Exposure time 28 d Result: Readily biodegradable. (OECD Test Guideline 301B)	
Phenoxyacetic Anhydride (14316-61-1)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
Tetrahydrofuran (109-99-9)		
Partition coefficient n-octanol/water (Log Kow)	0.46	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).	
Pyridine (anhydrous) (110-86-1)		
Partition coefficient n-octanol/water (Log Kow)	0.65	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.7. Other adverse effects	
Tetrahydrofuran	: Toxicity to fish: Flow-through test: LC50: Pimephales promelas (fathead minnow). 2.160 mg/l - 96 h Remarks: (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates:
	Static test: EC50: Daphnia magna (Water flea): 3.485 mg/l - 48 h Remarks: (OECD Test Guideline 202)
	Toxicity to bacteria:
	Static test: EC20: activated sludge: ca. 800 mg/l - 0,5 h
	Remarks: (OECD Test Guideline 209)
Pyridine	: Toxicity to fish:
	Semi-static test: EC50: Danio rerio (zebra fish): 560 - 1.000 mg/l - 96 h
	Remarks: (OECD Test Guideline 203)
	(in analogy to similar products)
	Toxicity to daphnia and other aquatic invertebrates: EC50: Daphnia magna (Water flea): 320 mg/l - 48 h
	Remarks: (OECD Test Guideline 202)
	(in analogy to similar products)
	Toxicity to algae:
	Static test: EC50: Pseudokirchneriella subcapitata: 320 mg/l - 72 h
	Remarks: (OECD Test Guideline 201)
	(in analogy to similar products)
	IC5: Scenedesmus quadricauda (Green algae): 120 mg/l - 7 d
	Remarks: (maximum permissible toxic concentration)
	EC50: SELENASTRUM: 100,00 - 180,00 mg/l - 72 h

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Product residues are to be disposed of in compliance with national and regional regulations dispose. Keep chemicals in original containers. Not with other waste mix. Uncleaned containers are to be treated according to the product. Pay attention to the waste policy 2008/98/EG.
Product/Packaging disposal recommendations Ecological information	Contaminated packaging to be disposed as unused product.Avoid release to the environment.

SECTION 14: Transport information		
In accordance with ADR / IMDG / IATA		
ADR	IMDG	ΙΑΤΑ
14.1. UN number or ID number		
UN 1993	UN 1993	UN 1993
14.2. UN proper shipping name		
FLAMMABLE LIQUID, N.O.S. (Mixture of Phenoxyacetic anhydride and Pyridine in Tetrahydrofuran)	FLAMMABLE LIQUID, N.O.S. (Mixture of Phenoxyacetic anhydride and Pyridine in Tetrahydrofuran)	Flammable liquid, n.o.s. (Mixture of Phenoxyacetic anhydride and Pyridine in Tetrahydrofuran)
14.3. Transport hazard class(es)		·
3	3	3

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	ΙΑΤΑ
14.4. Packing group		
II	II	II
14.5. Environmental hazards	· · · · · ·	
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available	· · · · · ·	
14.6. Special precautions for user		
Overland transport Tunnel restriction code (ADR)	: D/E	
Transport by sea EmS-No. (Fire) EmS-No. (Spillage)	: F-E : S-C	

Air transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

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

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

•		
Seveso Additional information	: Seveso III: Directive 2012/18/EU of the	: ACUTE TOXIC
	European Parliament and of the Council on the	
	control of major-accident hazards involving	
	dangerous substances.	
		: FLAMMABLE LIQUIDS

Explosives Precursors Regulation (2019/1148)

Seveso Directive (Disaster Risk Reduction)

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Drug Precursors Regulation (273/2004)

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

15.1.2. National regulations

Germany

Employment restrictions	 Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK) Storage class (LGK, TRGS 510) Hazardous Incident Ordinance (12. BImSchV)	 WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1). LGK 3 - Flammable liquids. Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Other information : None.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Carc. 2	Carcinogenicity, Category 2	
EUH019	May form explosive peroxides.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

Safety Data Sheet (SDS), EU

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