

# Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 6/6/2022 Revision date: 4/12/2022 Version: 1.1 SDS number: P2022052310

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

#### 1.1. Product identifier

Product form	:	Substance
Substance name	:	Acetic Anhydride (C <sub>4</sub> H <sub>6</sub> O <sub>3</sub> )
Chemical name	:	Acetic Anhydride
EC Index-No.	:	607-008-00-9
EC-No.	:	203-564-8
CAS-No.	:	108-24-7
REACH Registration No.	:	01-2119486470-36-0038

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Organic Synthesis: Acetylating, dehydrating and bleaching agent; manufacture of Cellulose acetate fibers, plastics, vinyl acetate, pharmaceuticals, magnetic tape, photographic films, and cigarette filters; as an esterifying agent for food starch (5% maximum); as an acetylizer in examining wool fat, glycerol, fatty and volatile oils, resins; or in the detection of rosin.

##### 1.2.2. Uses advised against

No additional information available

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

Sahara International Petrochemical Company (Sipchem)  
Saudi Arabia, Jubail Industrial City 31961, P.O Box 12021.  
T 966 13 359 9999  
[compliance@sipchem.com](mailto:compliance@sipchem.com) - <https://www.sipchem.com>

#### 1.4. Emergency telephone number

T +966 13 359 9985 (24 x 7)

### SECTION 2: Hazards identification

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

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

Flammable liquids, Category 3	H226
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Full text of H- and EUH-statements: see section 16	

##### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Harmful if inhaled. Harmful if swallowed. May cause respiratory irritation. Causes severe skin burns and eye damage.

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

GHS05

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.  
H302+H332 - Harmful if swallowed or if inhaled.  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P235 - Keep cool.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.. Immediately call a POISON CENTER or doctor.  
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

## 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The substance is not 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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>)

Name	Product identifier	%	Specific Concentration limits
Acetic Anhydride	CAS-No.: 108-24-7 EC-No.: 203-564-8 EC Index-No.: 607-008-00-9 REACH Registration No. 01-2119486470-36-0038	100%	Eye Dam. 1; H318: 5 % $\leq$ C < 25 % Eye Irrit. 2; H319: 1 % $\leq$ C < 5 % STOT SE 3; H335: C $\geq$ 5 % Skin Corr. 1B; H314: C $\geq$ 25 % Skin Irrit. 2; H315: 5 % $\leq$ C < 25 %

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general :

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest. Call a poison center or a doctor if you feel unwell.

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

First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

#### 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	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: On combustion forms: carbon oxides
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protective equipment for firefighters	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

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

Methods for cleaning up	: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Provide good ventilation in process area to prevent formation of vapour. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Keep container tightly closed in a cool, well-ventilated place. Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 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

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Acetic Anhydride	Inhalation 4.2 mg/m <sup>3</sup> (Systemic, Chronic)	3.058 mg/L (Water (Fresh))
	Inhalation 4.2 mg/m <sup>3</sup> (Local, Chronic)	0.306 mg/L (Water - Intermittent release)
	Inhalation 12.6 mg/m <sup>3</sup> (Local, Acute)	11.36 mg/kg sediment dw (Sediment (Fresh Water))
		1.136 mg/kg sediment dw (Sediment (Marine))
		0.47 mg/kg soil dw (Soil)
		115 mg/L (STP)

\* Values for General Population

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

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

**Personal protective equipment:**

Avoid all unnecessary exposure.

#### 8.2.2.1. Eye and face protection

**Eye protection:**

Chemical goggles or safety glasses. Use eye protection according to EN 166. Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**

Wear suitable protective clothing

**Hand protection:**

Wear protective gloves. Wear suitable gloves tested to EN374

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**

Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

**Other information:**

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: -73 °C
Freezing point	: Not available
Boiling point	: 140 °C
Flammability	: Flammable.
Lower explosion limit	: 2.7 vol %
Upper explosion limit	: 10.3 vol %
Flash point	: 49 °C
Auto-ignition temperature	: 316 °C
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 0.901 cP @20 °C

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

Solubility	: Water: 0.12 g/l @20 °C, reacts
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 10 mm Hg @36 °C
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: 1.0820
Relative vapour density at 20 °C	: 3.52
Particle characteristics	: Not applicable

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

### 9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : 0.46

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts violently with water.

### 10.2. Chemical stability

Sensitive to moisture. May form flammable gases or vapors.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with sodium/potassium hydroxide, nitrates. Potentially violent reaction with potassium permanganate, perchloric acid, nitric acid, hydrogen peroxide, chromium VI oxide, ethanol, water.

### 10.4. Conditions to avoid

Avoid heat and storing product in near product flash point. Avoid contact with combustible materials and strong oxidizers.

### 10.5. Incompatible materials

Iron, copper, peroxide containing materials.

### 10.6. Hazardous decomposition products

Carbon oxides, acidic vapors.

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Harmful if inhaled.

### Acetic Anhydride (108-24-7)

LD50 rat (Oral)	630 mg/kg bw
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitisation	: No data available

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

Germ cell mutagenicity	: S. typhimurium LT-2, TA1535, TA100, C3076, TA1537, D3052, TA1538, TA98. E. coli WP2 and WP2 uvrA: Negative [OECD 471] Rat: Negative [EU Method B.12 (Mutagenicity - In Vivo Mammalian Erythrocyte Micronucleus Test)]
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: No data available
Aspiration hazard	: No data available

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

No additional information available

### 11.2.2. Other information

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

#### Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) (108-24-7)

LC50 fish	265 mg/L (ECOTOX: 96 hour, Leuciscus idus)
Toxicity to daphnia and other aquatic invertebrates	55 mg/L; (IUCLID: 24 hour, Daphnia magna)
Toxicity to algae	4000 mg/L (Merck: 16 hr. Scenedesmus quadricauda)

### 12.2. Persistence and degradability

#### Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) (108-24-7)

Persistence and degradability : Readily biodegradable >95% (OECD Test Guideline 302B , 5 day)

### 12.3. Bioaccumulative potential

#### Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) (108-24-7)

Bioaccumulative potential : Not expected (experimental log Pow: 0.58)

### 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

No additional information available

### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Flammable vapours may accumulate in the container.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information






In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1715	UN 1715	UN 1715	UN 1715	UN 1715
<b>14.2. UN proper shipping name</b>				
Acetic Anhydride	Acetic Anhydride	Acetic Anhydride	Acetic Anhydride	Acetic Anhydride

### Transport document description

UN 1715 Acetic Anhydride, 8 (3), II, (D/E)	UN 1715 Acetic Anhydride, 8 (3), II (54°C c.c.)	UN 1715 Acetic Anhydride, 8 (3), II	UN 1715 Acetic Anhydride, 8 (3), II	UN 1715 Acetic Anhydride, 8 (3), II
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### 14.3. Transport hazard class(es)

8 (3)	8 (3)	8 (3)	8 (3)	8 (3)
				

### 14.4. Packing group

II	II	II	II	II
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### 14.5. Environmental hazards

Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
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No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: CF1
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP2
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 83



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

Orange plates	:	<b>83</b>
		<b>1715</b>
Tunnel restriction code (ADR)	:	D/E
<b>Transport by sea</b>		
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-C
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SGG1, SG36, SG49
Flash point (IMDG)	:	54°C c.c.
Properties and observations (IMDG)	:	Colourless, flammable liquid with an irritating odour. Flashpoint: 54°C c.c. Immiscible with water. In the presence of moisture, corrosive to most metals. Vapour irritates mucous membranes.
<b>Air transport</b>		
PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
ERG code (IATA)	:	8F
<b>Inland waterway transport</b>		
Classification code (ADN)	:	CF1
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1
<b>Rail transport</b>		
Classification code (RID)	:	CF1
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T7
Portable tank and bulk container special provisions (RID)	:	TP2
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	83

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

Not applicable

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

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) is not on the REACH Candidate List

Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) is not on the REACH Annex XIV List

Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Acetic Anhydride (C<sub>4</sub>H<sub>6</sub>O<sub>3</sub>) is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Acetic Anhydride		108-24-7	2915 24 00	Category 2	100 l	Annex I, Annex II

#### 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) : WGK 1, Slightly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 3)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

##### Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H302+H332;H314;H335>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people under 18 years are not allowed to use the product

##### Switzerland

Storage class (LK) : LK 3 - Flammable liquids

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

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

#### Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Effective concentration for 50 percent of test population (median effective concentration)
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)
LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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

**Full text of H- and EUH-statements:**

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
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.