Safety Data Sheet

According to Annex II to REACH — Regulation (EU) 2020/878

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product name	Aero-Wipe FKAW-735A

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

Identified use	Pre-saturated wet wipes for industrial, professional and consumer use
Uses advised against	No data available

1.3. Details of the supplier of the Safety Data Sheet

Name	Air Mount Technic Co. Ltd.
Full address	No. 168/1 Moo 12, Bueng Kham Phroi Sub-district, Lumlukka District, Pathum Thani Province, 12150
District & country	Thailand
Office	+66 (0) 2 055 1323
English support	+66 (0) 95 818 0146
Thai support	+66 (0) 61 131 1301
Email (competent person responsible for this SDS)	info@airmount-technic.com

1.4. Emergency telephone number

For urgent inquiries, refer to:

Office	+66 (0) 2 055 1323
English-language line	+66 (0) 95 818 0146
Thai-language line	+66 (0) 61 131 1301

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions of (EC) Regulation 1272/2008 (CLP) and its subsequent amendments and supplements. The product therefore requires a Safety Data Sheet that complies with the provisions of (EU) Regulation 2020/878. Additional information concerning risks to health and / or the environment is given in Sections 11 and 12 of this sheet.

Hazard classification and indication

Hazard class & category	Code	Hazard statement
Flammable liquid, category 2	H225	Highly flammable liquid and vapor.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target-organ toxicity — single exposure, category 3	H336	May cause drowsiness or dizziness.

2.2. Label elements

Hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms



Signal word	Danger

Hazard statements

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical / ventilating / lighting] equipment.
P242	Use non-sparking tools.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains

Propan-2-ol.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB substance in concentration ≥ 0.1%. The product does not contain substances with endocrine-disrupting properties in concentration ≥ 0.1%.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Information not relevant.

3.2. Mixtures

Substance & identifiers	Conc. (%)	Classification (EC) 1272/2008 (CLP)
Propan-2-ol INDEX: 603-117-00-0 EC: 200-661-7 CAS: 67-63-0	70–80	Flam. Liq. 2 — H225; Eye Irrit. 2 — H319; STOT SE 3 — H336

The full wording of hazard (H) phrases is given in Section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of doubt or in the presence of symptoms, contact a doctor and show this document. In case of more severe symptoms, ask for immediate medical aid.

EYES	Remove contact lenses if present and if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice / attention.
SKIN	Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.
INGESTION	Do not induce vomiting unless explicitly authorized by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice / attention.
INHALATION	Remove the victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary, administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice / attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of contamination. In the absence of other more specific indications, the use of disposable gloves is recommended in the event of possible contact with body fluids. For the type of PPE suitable for the substance or mixture, see Section 8.

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

Specific information on symptoms and effects caused by the product is unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If symptoms occur, whether acute or delayed, consult a doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, foam, chemical powder. In the case of product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapors and to protect those trying to stem the leak.

Unsuitable extinguishing media

Do not use jets of water. Water is not effective for putting out fires, but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

Excess pressure may form in containers exposed to fire, with a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

General information

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous to health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated extinguishing water and the remains of the fire in accordance with applicable regulations.

Special protective equipment for firefighters

Normal fire-fighting clothing, i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30), in combination with self-contained open-circuit positive-pressure compressed-air breathing apparatus (BS EN 137).

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard. Wear suitable protective equipment (including the personal protective equipment referred to in Section 8 of this Safety Data Sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply both to processing staff and to those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container by checking Section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well ventilated. Contaminated material should be disposed of in compliance with the provisions set forth in Section 13.

6.4. Reference to other sections

Information on personal protection and disposal is given in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapors may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid the build-up of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through tubes and equipment may cause the formation and accumulation of electrostatic charges. To avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurized. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a cool and well-ventilated place, away from direct sunlight. Keep far away from sources of heat, naked flames and sparks, and other sources of ignition. Keep containers away from any incompatible materials; see Section 10 for details.

Storage class TRGS 510 (Germany): 3

7.3. Specific end use(s)

Information not available.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Regulatory references

Code	Country	Reference
AUS	Österreich	Gesamte Rechtsvorschrift für Grenzwerteverordnung 2021, Fassung vom 14.05.2023
BEL	Belgique	Liste de valeurs limites d'exposition aux agents chimiques, livre VI du Code du bien-être au travail
BGR	България	Ordinance No. 13 of 30 December 2003 on the protection of workers from risks associated with exposure to chemical agents at work (as amended SG No. 5 of 17 Jan 2020)
CHE	Suisse / Schweiz	VME / VLE (SUVA); Grenzwerte am Arbeitsplatz: MAK (SUVA)
CZE	Česká Republika	Government Decree of 10 May 2021 amending Government Decree No. 361/2007 on health-protection conditions at work

Code	Country	Reference
DEU	Deutschland	MAK- und BAT-Werte-Liste 2022, Mitteilung 58
DNK	Danmark	BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España, 2023
EST	Eesti	Workplace chemical-agent limit values [RT I, 21.12.2022, 14]
FRA	France	Décret n° 2021-1849 du 28 décembre 2021
FIN	Suomi	HTP-VÄRDEN 2020
GRC	Ελλάδα	P.D. 26/2020 (Government Gazette 50/A) harmonising Greek law with Directives 2017/2398/EU, 2019/130/EU and 2019/983/EU
HUN	Magyarország	ITM Decree 5/2020 (II.6.) on the protection of the health and safety of workers exposed to chemical agents
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama (NN 1/2021)
IRL	Éire	2020 Code of Practice (Chemical Agents) Regulations 2001–2015
LTU	Lietuva	Lithuanian Hygienic Standard HN 23:2011 on occupational exposure limit values for chemicals
LVA	Latvija	Amendments to Cabinet Regulation No. 325 (15.05.2007) on work-protection requirements for exposure to chemicals
NOR	Norge	Regulation on limit and action values for physical and chemical factors in the working environment, 21 August 2018 No. 1255
NLD	Nederland	Arbeidsomstandighedenregeling — list of statutory limit values
POL	Polska	Regulation of the Minister of Development, Labour and Technology of 18 February 2021 on maximum permissible concentrations of substances harmful to health
ROU	România	Government Decision No. 53/2021 amending Government Decision No. 1218/2006 and No. 1093/2006
RUS	Россия	Resolution of 13 February 2018 No. 25 approving Hygienic Standards GN 2.2.5.3532-18 (MAC of harmful substances in workplace air)
SWE	Sverige	Occupational exposure limit values, AFS 2018:1
SVK	Slovensko	Government Decree of 12 August 2020 amending Decree No. 356/2006 on protection from carcinogens and mutagens at work
SVN	Slovenija	Regulation on the protection of workers from risks due to exposure to chemical substances at work (Uradni list RS)
TUR	Türkiye	Regulation on Health and Safety Measures in Work with Chemical Substances (12.08.2013; amended 20.10.2023)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition, 2020)
—	ACGIH	TLV-ACGIH 2023

Threshold Limit Values — Propan-2-ol

Type	Country	TWA/8h (mg/m³)	TWA (ppm)	STEL (mg/m³)	STEL (ppm)	Notes
MAK	AUS	500	200	2000	800	Frequency 4× per shift
VLEP	BEL	500	200	1000	400	

Type	Country	TWA/8h (mg/m³)	TWA (ppm)	STEL (mg/m³)	STEL (ppm)	Notes
TLV	BGR	980		1225		
MAK	CHE	500	200	1000	400	
VME/VLE	CHE	500	200	1000	400	
TLV	CZE	500	200	1000	400	
AGW	DEU	500	200	1000	400	
MAK	DEU	500	200	1000	400	
TLV	DNK	490	200			
VLA	ESP	500	200	1000	400	
TLV	EST	350	150	600	250	
VLEP	FRA	980	400			
HTP	FIN	500	200	620	250	
TLV	GRC	980	400	1225	500	
AK	HUN	500	200	1000	400	Skin
GVI/KGVI	HRV	999	400	1250	500	
OELV	IRL		200		400	Skin
RD	LTU	350	150	600	250	
RV	LVA	350		600		
TLV	NOR	245	100			
TGG	NLD	650				
NDS/NDSCh	POL	900		1200		Skin
TLV	ROU	200	81	500	203	
ПДК	RUS	10		50		Vapors
NGV/KGV	SWE	350	150	600 (C)	250 (C)	
NPEL	SVK	500	200	1000	400	
MV	SVN	500	200	1000	400	
ESD	TUR	980	400			
WEL	GBR	999	400	1250	500	
TLV-ACGIH	—	492	200	983	400	

Legend: (C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well ventilated through effective local aspiration. When choosing personal protective equipment, ask your chemical-substance supplier for advice. Personal protective equipment must be CE-marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye-wash station.

Hand protection

Protect hands with category III work gloves. The following should be considered when choosing work-glove material (see standard EN 374): compatibility, degradation, permeability time. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Skin protection

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in working environments where there is a risk of explosion.

Eye protection

Wear airtight protective goggles (see standard EN ISO 16321).

Respiratory protection

Respiratory protection devices must be used if the technical measures adopted are not sufficient to restrict the worker's exposure to the threshold values considered. Use a mask with a type AX filter, whose class (1, 2 or 3) must be chosen according to the limit-of-use concentration (see standard EN 14387). If the substance considered is odorless, or if its olfactory threshold is higher than the corresponding TLV-TWA, or in the case of an emergency, wear open-circuit compressed-air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For the correct choice of respiratory protection device, see standard EN 529.

Environmental exposure controls

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Wet wipe
Color	Colorless
Odor	Alcohol-like
Melting point / freezing point	–89.5 °C
Initial boiling point	82 °C
Flammability	Not available
Lower explosive limit	2 % (V)
Upper explosive limit	13.4 % (V)
Flash point	12.0 °C (closed cup)
Auto-ignition temperature	425.0 °C
Decomposition temperature	Distillable in an undecomposed state at normal pressure.
pH	Neutral at 20 °C
Kinematic viscosity	Not available
Dynamic viscosity	2.2 mPa·s at 20 °C
Solubility	Soluble in water at 20 °C
Partition coefficient (n-octanol / water)	0.05 — Bioaccumulation is not expected.
Vapor pressure	43 hPa at 20 °C

Density	0.785 g/mL at 25 °C
Relative vapor density	2.07
Particle characteristics	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available.

9.2.2. Other safety characteristics

Minimum ignition energy	0.65 mJ
Conductivity	< 0.1 µS/cm
Surface tension	20.8 mN/m at 25.0 °C

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity	Vapors may form an explosive mixture with air.
10.2. Chemical stability	Reacts with air to form peroxides. The product is chemically stable under standard ambient conditions (room temperature). Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	Information not available.
10.4. Conditions to avoid	Warming.
10.5. Incompatible materials	Rubber, various plastics, oils.
10.6. Hazardous decomposition products	In the event of fire, see Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in Section 3 in order to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information	Information not available
Information on likely routes of exposure	Information not available
Interactive effects	Information not available

Delayed and immediate effects — short- and long-term exposure

Propan-2-ol: central nervous system depression. Prolonged or repeated exposure can cause nausea, headache, vomiting, narcosis, drowsiness. Overexposure may cause mild, reversible liver effects. Aspiration may lead to lung edema and pneumonia. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. After absorption: headache, dizziness, inebriation, unconsciousness, narcosis. After uptake of large quantities: coma. Handle in accordance with good industrial hygiene and safety practice. Kidney — irregularities (based on human evidence).

Acute toxicity

ATE (Inhalation) — mixture	Not classified (no significant component)
ATE (Oral) — mixture	Not classified (no significant component)

ATE (Dermal) — mixture	Not classified (no significant component)
LD50 (Dermal) — Propan-2-ol	12,800 mg/kg — rabbit
LD50 (Oral) — Propan-2-ol	5,840 mg/kg — rat
LC50 (Inhalation, vapors) — Propan-2-ol	37.5 mg/L / 4 h — rat, male and female

Skin corrosion / irritation

Does not meet the classification criteria for this hazard class. Propan-2-ol — skin, rabbit: no skin irritation (4 h); OECD Test Guideline 404.

Serious eye damage / irritation

Causes serious eye irritation. Propan-2-ol — eyes, rabbit: eye irritation; OECD Test Guideline 405. Classified per Regulation (EC) 1272/2008, Annex VI.

Respiratory or skin sensitization

Does not meet the classification criteria for this hazard class. Propan-2-ol — Buehler test, guinea pig: negative; OECD Test Guideline 406.

Germ-cell mutagenicity

Does not meet the classification criteria for this hazard class. Propan-2-ol — Ames test (*Salmonella typhimurium*) with and without metabolic activation: negative (OECD 471). *In-vitro* mammalian cell gene mutation test (Chinese hamster ovary cells): negative (OECD 476). *In-vivo* micronucleus test (mouse, bone marrow, intraperitoneal): negative (OECD 474).

Carcinogenicity

Does not meet the classification criteria for this hazard class.

Reproductive toxicity

Does not meet the classification criteria for this hazard class.

STOT — single exposure

May cause drowsiness or dizziness. Propan-2-ol — inhalation, oral; central nervous system. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1 / 3.2).

STOT — repeated exposure

Does not meet the classification criteria for this hazard class.

Aspiration hazard

Does not meet the classification criteria for this hazard class.

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human-health effects under evaluation.

SECTION 12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity — Propan-2-ol

LC50 — Fish	9,640 mg/L / 96 h — *Pimephales promelas* (fathead minnow); OECD Test Guideline 203
EC50 — Crustacea	13,299 mg/L / 48 h — *Daphnia magna* (water flea); IUCLID
IC50 — algae / aquatic plants	> 1,000 mg/L / 72 h — *Desmodesmus subspicatus* (green algae); IUCLID
EC5 — Bacteria	1,050 mg/L / 16 h — *Pseudomonas putida*

12.2. Persistence and degradability — Propan-2-ol

Biodegradability	Rapidly degradable, 53 % aerobic; exposure time 5 d (Directive 67/548/EEC, Annex V, C.6)

Theoretical oxygen demand	2.400 mg/g
BOD / ThBOD ratio	49 % (IUCLID)

12.3. Bioaccumulative potential

Propan-2-ol — no bioaccumulation is to be expected (log $P_{OW} \leq 4$).

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB substance in concentration ≥ 0.1%.

12.6. Endocrine-disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Reuse when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorized waste-management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

The management of waste arising from the use or dispersal of this product must be organized in accordance with occupational-safety regulations. See Section 8 for the possible need for PPE.

Contaminated packaging

Contaminated packaging must be recovered or disposed of in compliance with national waste-management regulations.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number or ID number	ADR / RID, IMDG, IATA: UN 1219
14.2. UN proper shipping name	ADR / RID, IMDG, IATA: ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION
14.3. Transport hazard class(es)	ADR / RID: Class 3, Label 3 — IMDG: Class 3, Label 3 — IATA: Class 3, Label 3
14.4. Packing group	ADR / RID, IMDG, IATA: II
14.5. Environmental hazards	ADR / RID: No — IMDG: Not a marine pollutant — IATA: No

14.6. Special precautions for user

ADR / RID	HIN — Kemler: 33; Limited Quantities: 1 L; Tunnel restriction code: (D/E); Special provision: 601
IMDG	EMS: F-E, S-D; Limited Quantities: 1 L
IATA — Cargo	Maximum quantity: 60 L; Packaging instructions: 364
IATA — Passengers	Maximum quantity: 5 L; Packaging instructions: 353
IATA — Special provision	A180

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant.

SECTION 15. REGULATORY INFORMATION

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

Seveso category — Directive 2012/18/EU	P5c
REACH Annex XVII restrictions — product-level	Point 3
REACH Annex XVII restrictions — contained substance	Point 40 — Propan-2-ol
Regulation (EU) 2019/1148 (explosives precursors)	Not applicable
Substances in the Candidate List (Art. 59 REACH)	On the basis of available data, the product does not contain any SVHC in concentration ≥ 0.1%.
Substances subject to authorization (Annex XIV REACH)	None
Substances subject to export reporting (Regulation (EU) 649/2012)	None
Substances subject to the Rotterdam Convention	None
Substances subject to the Stockholm Convention	None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that Directive 98/24/EC is respected.

German regulation on the classification of substances hazardous to water (AwSV, of 18 April 2017)

WGK 1: Low hazard to waters.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation or for the substances indicated in Section 3.

SECTION 16. OTHER INFORMATION

Hazard (H) statements referenced in Sections 2 and 3

Flam. Liq. 2	Flammable liquid, category 2
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target-organ toxicity — single exposure, category 3
H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Legend

ADR	European Agreement concerning the international carriage of Dangerous goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstract Service Number
CE50	Effective concentration (required to induce a 50% effect)

CE	Identifier in ESIS (European archive of existing substances)
CLP	Regulation (EC) 1272/2008
DNEL	Derived No-Effect Level
EmS	Emergency Schedule
GHS	Globally Harmonized System of classification and labeling of chemicals
IATA DGR	International Air Transport Association — Dangerous Goods Regulations
IC50	Immobilization Concentration 50%
IMDG	International Maritime Code for Dangerous Goods
IMO	International Maritime Organization
INDEX	Identifier in Annex VI of CLP
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
OEL	Occupational Exposure Level
PBT	Persistent, Bioaccumulative and Toxic
PEC	Predicted Environmental Concentration
PEL	Predicted Exposure Level
PMT	Persistent, Mobile and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) 1907/2006
RID	Regulation concerning the international transport of dangerous goods by rail
TLV	Threshold Limit Value
TLV CEILING	Concentration that should not be exceeded during any time of occupational exposure
TWA	Time-weighted average exposure limit
STEL	Short-term exposure limit
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
WGK	Water hazard classes (German)

General bibliography

1.	Regulation (EC) 1907/2006 (REACH) of the European Parliament
2.	Regulation (EC) 1272/2008 (CLP) of the European Parliament
3.	Regulation (EU) 2020/878 (II Annex of the REACH Regulation)
4.	Regulation (EC) 790/2009 and subsequent Adaptations to Technical Progress (ATPs) of the CLP Regulation, through Delegated Regulation (EU) 2024/197 (XXI ATP)

5.	Regulation (EU) 2019/1148 on the marketing and use of explosives precursors
6.	The Merck Index, 10th Edition
7.	Handling Chemical Safety
8.	INRS — Fiche Toxicologique (toxicological data sheet)
9.	Patty's Industrial Hygiene and Toxicology
10.	N. I. Sax — Dangerous Properties of Industrial Materials, 7th Edition (1989)
11.	IFA GESTIS website
12.	ECHA website
13.	Database of SDS models for chemicals — Ministry of Health and ISS (Istituto Superiore di Sanità), Italy

Note for users: The information contained in this sheet is based on our own knowledge as of the date of the last revision. Users must verify the suitability and completeness of the provided information according to their specific use of the product. This document must not be regarded as a guarantee of any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification: Chemical and physical hazards — product classification derives from criteria established by Annex I, Part 2 of the CLP Regulation; the data for evaluation of chemical / physical properties are reported in Section 9. Health hazards — product classification is based on calculation methods as per Annex I, Part 3 of the CLP Regulation, unless determined otherwise in Section 11. Environmental hazards — product classification is based on calculation methods as per Annex I, Part 4 of the CLP Regulation, unless determined otherwise in Section 12.