

SAFETY DATA SHEET

(GHS, Appendix 4)

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

- 1.1. Product identifier
- Product name : Methyl Ionone Pure
- EC N° : 204-846-3
- CAS N° : 127-51-5
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
- Industrial-grade aromatic raw material, not intended for retail sale
- 1.3. Details of the supplier of the safety data sheet
- Registered company name : Aromatics Original Material Co., Ltd.
- Address : 3/8 1st floor Bangwaek Rd, Bangpai, Bangkae, Bangkok 10160 Thailand.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS compliant.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Hazardous to the aquatic environment - Acute hazard, Category 2 (Aquatic Acute 2, H401).

Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

GHS compliant.

Hazard pictograms :



GHS09



GHS07

Signal Word :

WARNING

Product identifiers (list of classified components) :

CAS 7779-30-81-(2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)PENT-1-EN-3-ONE

CAS 127-43-5METHYL-BETA-IONONE

CAS 127-51-5ALPHA-ISO-METHYLIONONE

Hazard statements :

H315Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water/...

P391 Collect spillage.

Precautionary statements - Disposal :

P501 Dispose of contents/container in accordance with local regulation.

2.3. Other hazards

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Composition :

Identification	Classification GHS	Note	%
CAS: 7779-30-8 EC: 231-926-5 1-(2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)PENT-1-EN-3-ONE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411		50 <= x % < 100
CAS: 127-43-5 EC: 204-843-7 METHYL-BETA-IONONE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411		25 <= x % < 50
CAS: 127-51-5 EC: 204-846-3 ALPHA-ISO-METHYLIONONE	GHS07, GHS09 Wng Skin Irrit. 3, H316 Skin Sens. 1B, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411		2.5 <= x % < 10
CAS: 78-93-3 EC: 201-159-0 2-BUTANONE	GHS02, GHS07 Dgr Flam. Liq. 2, H225 Acute Tox. 5, H303 Skin Irrit. 3, H316 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	1 <= x % < 2.5

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the substance is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
78-93-3	600	200	900	300	-
- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	300 ppm		BEI	
- South Africa / DME (Department of Minerals and Energy, 2006) :

- South Africa / DOL RL (Department of Labour, Recommended limits, 1995) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 590 mg/m3	300 ppm 885 mg/m3			

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
78-93-3		200 ppm 600 mg/m3		1(I)

- Australia (NOHSC: 3008, 1995) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	150 ppm 445 mg/m3	300 ppm 890 mg/m3		A	

- Belgium (Royal decree of 11/05/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Brazil :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	155 ppm	-	-	-	-

- Canada / Alberta (Occupational health and safety code, 2009) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 590 mg/m3	300 ppm 885 mg/m3			

- Canada / British Colombia (2009) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	50 ppm	100 ppm			

- Canada / Quebec (Regulations on occupational health and safety) :

- China (GBZ 2.1, 2007) :

CAS	TWA :	STEL :	Anm :	TWA :	STEL :
78-93-3	300 mg/m3	600 mg/m3			

- Denmark (2020) :

Stof	TWA	VSTEL	Loftvaerdi	Anm
78-93-3	50 ppm 145 mg/m3			EH

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
78-93-3	200	600	300	900	*	84

- Finland (HTP-vården 2018) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	20 ppm 60 mg/m3	100 ppm 300 mg/m3			

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), 2019) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3		VLB. VLI	

- Greece (90/1999) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3		200 ppm 600 mg/m3	300 ppm 900 mgm/3		

- Hong-Kong (Code of practice on control of air impurities (Chemicals substances) in the workplace, 04/2002) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	300 ppm	-	-	-

- Ireland (Code of practice for the Chemical Agents Regulations, 2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Italy (Decree, 26/02/2004) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Japan (JSOH, Recommendation of occupational exposure limits 2021-2022) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 590 mg/m3				

- Latvia (Regulation No. 325/2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	67 ppm 200 mg/m3	300 ppm 900 mg/m3			

- Lithuania (HN 23 :2001) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Luxembourg (RGD 14/11/2016, Memorial A n°247 du 8 mars 2017) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Malaysia :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	-	-	-	-

- Malta (L.N. 353/2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Mexico :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	300 ppm	-	-	-

- Norway (Veiledning om administrative normer for forurensning i arbeidsatmosfære, 2019) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	75 ppm 220 mg/m3			E	

- New Zealand (Workplace Exposure standards, 11/2020, edition 12-1) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	150 ppm 445 mg/m3	300 ppm 890 mg/m3		bio	

- Netherlands / MAC-waarde (10 december 2014) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	197 ppm 590 mg/m3	300 ppm 900 mg/m3		H	

- Poland (Dz. U. z 2018 r. poz. 917, 1000 i 1076) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	450 mg/m3	900 mg/m3	-	-	-

- Portugal (1.a N° 26 - 06/01/2012) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Czech Republic (Regulation No. 361/2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	600 mg/m3	900 mg/m3		I	

- Slovakia (Regulation 300/2007, 471/2011 23/11/2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			

- Slovenia (Uradni List, 04/06/2015) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3		200 ppm 600 mg/m3		BAT. EU*	

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
78-93-3	200 ppm 590 mg/m3	200 ppm 590 mg/m3		

- Sweden (AFS 2018 :1) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	50 ppm 150 mg/m3	300 ppm 900 mg/m3			

- Romania (Hotărâre 1218/2006) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	63 ppm 200 mg/m3	101 ppm 300 mg/m3			

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m3	300 ppm 899 mg/m3		Sk. BMGV	

- USA / NIOSH REL (National Institute for Occupational Safety and Health, Recommended exposure limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	300 ppm	-	-	-

- USA / NIOSH IDLH (National Institute for Occupational Safety and Health, Immediately Dangerous to Life or Health Concentrations) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 590 mg/m3	300 ppm 885 mg/m3			

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 590 mg/m3				

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.
Store personal protective equipment in a clean place, away from the work area.
Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.
Gloves must be selected according to the application and duration of use at the workstation.
Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.
Type of gloves recommended :
- PVA (Polyvinyl alcohol)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Avoid skin contact.
Wear suitable protective clothing.
Suitable type of protective clothing :
In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.
In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.
Work clothing worn by personnel shall be laundered regularly.
After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

No data available.

Physical state

Physical state :	Fluid liquid.
Colour	
Unspecified	
Odour	
Odour threshold :	Not stated.
Melting point	
Melting point/melting range :	Not specified.
Freezing point	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	Not specified.
Flammability	
Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit	
Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.
Flash point	
Flash Point Interval :	> 93°C Method for determining the flash point: ASTM D 93-15 (Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester).
Auto-ignition temperature	
Self-ignition temperature :	Not specified.
Decomposition temperature	
Decomposition point/decomposition range :	Not specified.
pH	
pH :	Not relevant.
pH (aqueous solution) :	Not stated.
Kinematic viscosity	
Viscosity :	Not stated.
Solubility	
Water solubility :	Insoluble.
Fat solubility :	Not stated.
Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	Not stated.
Vapour pressure	
Vapour pressure (50°C) :	Not stated.
Density and/or relative density	

Density :	0,920-0,940@20°C Method for determining the density : NF ISO 279:1999 (T75-111)
Relative vapour density	
Vapour density :	Not stated.
9.2. Other information	
Index of refraction :	1,495-1,505@20°C Method of determining the refractive index : NF ISO 280:1999 (T75-112)
9.2.1. Information with regard to physical hazard classes	
No data available.	
9.2.2. Other safety characteristics	
No data available.	

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity	No data available.
10.2. Chemical stability	This substance is stable under the recommended handling and storage conditions in section 7.
10.3. Possibility of hazardous reactions	When exposed to high temperatures, the substance can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.
10.4. Conditions to avoid	No data available.
10.5. Incompatible materials	No data available.
10.6. Hazardous decomposition products	The thermal decomposition may release/form : - carbon monoxide (CO) - carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects	Exposure to vapours from this solvent in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours. Repeated or prolonged contact with the substance may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eyes may cause irritation and reversible damage May cause an allergic reaction by skin contact.
11.1.1. Substances	
Acute toxicity :	
2-BUTANONE (CAS: 78-93-3)	

Oral route :

LD50 = 4000 mg/kg bodyweight/day

- 11.1.2 Complex substance
- No toxicological data available for the substances.
- 11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 108-88-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

- 12.1. Toxicity
- 12.1.2 Complex substance
- No aquatic toxicity data available for the substances.
- 12.2. Persistence and degradability
- No data available.
- 12.3. Bioaccumulative potential
- No data available.
- 12.4. Mobility in soil
- No data available.
- 12.5. Results of PBT and vPvB assessment
- No data available.
- 12.6. Endocrine disrupting properties
- No data available.
- 12.7. Other adverse effects
- No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the substance and/or its container must be determined in accordance with local regulations.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).

14.1. UN number

3082

14.2. UN proper shipping name

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	9	-	III	964	450 L	964	450 L	A97 A158 A197 A215	E1	
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197 A215	E1	
	Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)									

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(1-(2,6,6-trimethyl-2-cyclohexen-1-yl)pent-1-en-3-one)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION

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

The following regulations have been used:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS), review no. 8 (2019)

Container information:

No data available.

Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

- | | |
|------|--------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H303 | May be harmful if swallowed. |
| H315 | Causes skin irritation. |
| H316 | Causes mild skin irritation. |
| H317 | May cause an allergic skin reaction. |

H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
GHS07 : Exclamation mark
GHS09 : Environment
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.