

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

1.1. Product identifier

Mixture identification:

Trade name: MORCEM ELASTIC PM

Registration Number N/A

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

against Recommended use: Polyurethane for waterproofing and protection

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: GRUPO PUMA SL

AVDA. AGRUPACIÓN CÓRDOBA, NUM. 17

14014 CÓRDOBA - CÓRDOBA - ESPAÑA

Phone.: +34 901 11 69 12 - Fax: +34 957 44 19 92

fds@grupopuma.com

<http://www.grupopuma.com>

1.4. Emergency telephone number:

901 11 69 12 (Schedule of attention: 08:30 – 13:30 / 16:00 – 19:00)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1	May cause an allergic skin reaction.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure .

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words



Warning

Hazard statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure .

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

Contains:

2,4-Diisocyanatotoluene-polypropylene glycol copolymer

o-xylene

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: MORCEM ELASTIC PM

Hazardous components within the meaning of the CLP regulation and related classification:

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	2,4-Diisocyanatotoluene-polypropylene glycol copolymer	CAS:37273-56-6	Eye Irrit. 2; Skin Sens. 1, H319, H317	
≥10 - <20 %	o-xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT RE 2, H373; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412; STOT SE 3, H335	01-2119488216-32-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:



None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Remove all sources of ignition.
- Remove persons to safety.

6.2. Environmental precautions

- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

- Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
- Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
- Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
o-xylene	National	SWEDEN		221	50	442	100		SWEDEN, Short term value, 15 minutes average value
	National	FINLAND		220	50	440	100		FINLAND, hud
	National	NORWAY		108	25				NORWAY, H
	EU	NNN		221	50	442	100		Skin
	National	NORWAY		109	25	218	50		
	ACGIH	NNN				100	150		A4, BEI - URT and eye irr, CNS impair

Safety Data Sheet MORCEM ELASTIC PM
Safety Data Sheet dated: 15/01/2020 - version 4



DFG	GERMANY	C		880	200
ACGIH			100		150
National	SWEDEN		221	50	
National	FRANCE		221	50	442 100
National	SPAIN		221	50	442 100
National	GREECE		435	100	650 150
National	DENMARK		109	25	
National	FINLAND		220	50	440 100
National	GERMANY		440	100	
National	PORTUGAL		221	50	442 100
National	NORWAY		108	25	135 37,5
National	BELGIUM		221	50	442 100
NDS	POLAND		100		
NDSCh	POLAND				200
CHE	SWITZERLAND				870 200
NDS	NETHERLANDS		210		442
National	CZECHIA		200		
National	HUNGARY		221		442
Malaysia a OEL	MALAYSIA		434	100	
National	ESTONIA		200	50	450 100
National	LATVIA		221	50	442 100
National	CZECHIA	C			400
National	SLOVAKIA	C			442
National	SLOVAKIA		221	50	
National	SLOVENIA		221	50	442 100
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		220	50	441 100
National	BULGARIA		221,0	50	442 100
National	ROMANIA		221	50	442 100
TUR	TURKEY		221	50	442 100
National	LITHUANIA		221	50	442 100
National	CROATIA		221	50	442 100
EU			221	50	442 100

A4 - Not Classifiable as a Human Carcinogen; CNS impairment; eye and upper respiratory tract irritation

Indicative Possibility of significant uptake through the skin (pure)

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn



Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
o-xylene	1330-20-7	0,327 mg/l	Fresh Water		
		0,327 mg/l	Marine water		
		12,46 mg/kg	Freshwater sediments		
		12,46 mg/kg	Marine water sediments		
		2,31 mg/kg	Soil		
		6,58 mg/l	Microorganisms in sewage treatments		
		0,32 mg/l	Intermittent release		

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
o-xylene	1330-20-7	442,000000 mg/m3		174 mg/m3	Human Inhalation	Short Term, local effects	
		289 mg/m3		174 mg/m3	Human Inhalation	Short Term, systemic effects	
		212,000000 mg/kg		125,000000 mg/kg	Human Dermal	Long Term, systemic effects	
		221,000000 mg/m3		65,300000 mg/m3	Human Inhalation	Long Term, systemic effects	
				12,500000 mg/kg	Human Oral	Long Term, systemic effects	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties



Physical state: Liquid
Appearance and colour: Viscous various
Odour: N.A.
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: >30 °C (86 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.40 g/cm³
Solubility in water: N.A.
Partition coefficient (n-octanol/water): N.A. - This product is a mixture
Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature
Decomposition temperature: N.A.
Viscosity: 3,000.00 cPs
Explosive properties: N.A. - No components with explosive properties
Oxidizing properties: N.A. - No component with oxidizing properties
Solid/gas flammability: N.A.

9.2. Other information

No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

2,4-Diisocyanatotoluene- polypropylene glycol copolymer	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LC50 Inhalation Rat > 3,820 mg/l 4h
o-xylene	a) acute toxicity	LD50 Oral Mouse = 5627,00000 mg/kg LC50 Inhalation Vapour Rat = 11 mg/l 4h LD50 Skin Rabbit > 5000,00000 mg/kg LC50 Inhalation Rat = 29,08000 mg/l 4h LC50 Inhalation Rat = 6700,00000 ppm 4h LD50 Skin Rabbit > 4350 mg/kg LD50 Oral Rat = 3500 mg/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat > 2000,00000 ppm
	f) carcinogenicity	NOAEL Oral Rat = 500 mg/kg

g) reproductive toxicity NOAEL Inhalation Rat = 500,00000 ppm

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- k) Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
2,4-Diisocyanatotoluene-polypropylene glycol copolymer	CAS: 37273-56-6	c) Bacteria toxicity : EC50 > 10000 mg/L
o-xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : EC50 Daphnia = 165 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 2,60000 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 2,2 mg/L 72 c) Bacteria toxicity : EC50 = 96 mg/L 24 b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L - 56 days b) Aquatic chronic toxicity : NOEC Daphnia = 1,57 mg/L - 21 days a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13,4 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2,661 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13,10000 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30,26000 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia water flea = 3,82000 mg/L 48h a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0,60000 mg/L 48h b) Aquatic chronic toxicity : EC50 Algae = 0,44000 mg/L 72h a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13,5 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7,711 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,53 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCL

12.2. Persistence and degradability

Component	Persistence/Degradability:
o-xylene	Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Product:

Do not dispose of waste into sewers.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to an authorized waste disposal service.

Contaminated packaging:

Empty remaining content.

Dispose of as unused product.

Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

1139

14.2. UN proper shipping name

ADR-Shipping Name: COATING SOLUTION

IATA-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)

IMDG-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under-coating, drum or barrel lining)

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 3

ADR-Hazard identification number: 30

ADR-Special Provisions: -

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366



IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 955

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: N/A

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

N.A.

Transport in accordance with 2.2.3.1.5 of ADR and 2.3.2.5 of the IMDG Code.

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : 265 g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) 2015/830

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Products belongs to category P5c	5000	50000

German Water Hazard Class.

N.A.

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: None

SVHC Substances:

No Data Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.



H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
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2.6/3	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1	Calculation method
3.9/2	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive



DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO). IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 5. FIRE-FIGHTING MEASURES