

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: 411 00 15540-3080
Product name: NEW PLASTIC

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

Intended use: Protective restorer for plastics and fibers

1.3. Details of the supplier of the safety data sheet

Name: Meccanocar Italia S.r.l.
Full address: Via San Francesco, 22
District and Country: 56033 Capannoli (PI)
Italy

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet

moreno.meini@meccanocar.it

1.4. Emergency telephone number

For urgent inquiries refer to

National Poisons Information Service: +44 121 507 4123

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

NEW PLASTIC

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P211	Do not spray on an open flame or other ignition source.
P331	Do NOT induce vomiting.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor.

Contains: BENZENE DERIVATIVES, MONO-C10-13-ALCHILE
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES CAS 64742-49-0	58 ≤ x < 62	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411
EC 927-510-4 INDEX - Reg. no. 01-2119475515-33-XXXX		
HYDROCARBONS C3-4 CAS 68476-40-4	28,5 ≤ x < 30	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: H K U
EC 270-681-9 INDEX -		

NEW PLASTIC

Reg. no. 01-2119486557-22-XXXX

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

CAS 84961-70-6 10,5 ≤ x < 12 Asp. Tox. 1 H304

EC 284-660-7

INDEX -

Reg. no. 01-2119485843-26-XXXX

XYLENE (MIXTURE OF ISOMERS)

CAS 1330-20-7 0,2 ≤ x < 0,25 Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C

EC 215-535-7

INDEX 601-022-00-9

Reg. no. 01-2119488216-32-XXXX

ETHYLBENZENE

CAS 100-41-4 0 ≤ x < 0,05 Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412

EC 202-849-4

INDEX 601-023-00-4

Reg. no. 01-2119489370-35-XXXX

TOLUENE

CAS 108-88-3 0 ≤ x < 0,05 Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 3 H412

EC 203-625-9

INDEX 601-021-00-3

Reg. no. 01-2119471310-51-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 29,00 %

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. 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 for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

NEW PLASTIC**7.2. Conditions for safe storage, including any incompatibilities**

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection**8.1. Control parameters**

Regulatory References:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm

OEL

EU

1400

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				149 mg/kg bw/d				
Inhalation				447 mg/m3				2085 mg/m3
Skin				149 mg/kg bw/d				300 mg/kg bw/d

HYDROCARBONS C3-4**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm

TLV-ACGIH

1000

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Skin								23,4 mg/kg bw/d

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Predicted no-effect concentration - PNEC

NEW PLASTIC

Normal value in fresh water	0,001	mg/l
Normal value in marine water	0,0001	mg/l
Normal value for fresh water sediment	1,65	mg/kg
Normal value for marine water sediment	0,165	mg/kg
Normal value for water, intermittent release	0,001	mg/l
Normal value of STP microorganisms	2	mg/l
Normal value for the terrestrial compartment	0,329	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,2 mg/kg bw/d				
Inhalation				1,6 mg/m3				3,2 mg/m3
Skin				0,23 mg/kg bw/d				4,3 mg/kg bw/d

XYLENE (MIXTURE OF ISOMERS)**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
TLV	NOR	108	25			SKIN
VLE	PRT	221	50	442	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	65,3 mg/m3	65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

ETHYLBENZENE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	

NEW PLASTIC

VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
WEL	GBR	441	100	552	125	SKIN
VLEP	ITA	442	100	884	200	SKIN
TLV	NOR	20	5			SKIN
VLE	PRT	442	100	884	200	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,1	mg/l	
Normal value in marine water				0,01	mg/l	
Normal value for fresh water sediment				13,7	mg/kg	
Normal value for marine water sediment				1,37	mg/kg	
Normal value of STP microorganisms				9,6	mg/l	
Normal value for the food chain (secondary poisoning)				0,02	mg/kg	
Normal value for the terrestrial compartment				2,68	mg/kg	

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,6 mg/kg bw/d				
Inhalation				15 mg/m3			293 mg/m3	77 mg/m3
Skin								180 mg/kg bw/d

**TOLUENE
Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	192	50	384	100	SKIN
VLEP	FRA	76,8	20	384	100	SKIN
WEL	GBR	191	50	384	100	SKIN
VLEP	ITA	192	50			SKIN
TLV	NOR	94	25			SKIN
VLE	PRT	192	50	384	100	SKIN
OEL	EU	192	50	384	100	SKIN
TLV-ACGIH		75,4	20			

Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,68	mg/l	
Normal value in marine water				0,68	mg/l	
Normal value for fresh water sediment				16,39	mg/kg	
Normal value for marine water sediment				16,39	mg/kg	
Normal value of STP microorganisms				13,61	mg/l	
Normal value for the terrestrial compartment				2,89	mg/kg	

Health - Derived no-effect level - DNEL / DMEL

NEW PLASTIC

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				8,13 mg/kg bw/d				
Inhalation	226 mg/m3	226 mg/m3	56,5 mg/m3	56,5 mg/m3	384 mg/m3	384 mg/m3	192 mg/m3	192 mg/m3
Skin				226 mg/kg bw/d				384 mg/kg bw/d

Legend:

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

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

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 aired 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

None required.

SKIN PROTECTION

Wear category II 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.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Chemical resistant gloves are recommended. If contact with forearms is likely, wear glove-style gloves. Nitrile, CEN EN 420 and EN 374 standards provide general requirements and lists of glove types.

NEW PLASTIC

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

The choice of an appropriate glove depends not only on its material but also on other quality characteristics and is different from one manufacturer to another. Observe the instructions for permeability and breakthrough time provided by the glove supplier. Also take into consideration the specific local conditions in which the product is used, such as the risk of cuts, abrasions and contact times. breakthrough time measured according to EN 374, due to numerous external influences.

ETHYLBENZENE

- Use chemical resistant gloves suitable for the conditions of use.
- The selected protective gloves must meet the European standard EN 374.
- Fluoroelastomer glove material; material thickness 0.4 mm; breakthrough time \geq 480 min. Gloves must be replaced after 8 hours of wear (GESTIS recommendation).
- Gloves must be discarded and replaced if there are indications of degradation or chemicals breakthrough.

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	aerosol
Colour	colourless
Odour	solvent
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	< 0 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	>1
Relative density	0,75 Kg/l
Solubility	solubile in olio
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	400 °C
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

TOLUENE

Avoid exposure to: light.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

10.4. Conditions to avoid

Avoid overheating.

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Avoid heat, sparks, open flames and other sources of ignition.

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation. Extremes of temperature and direct sunlight

ETHYLBENZENE

- Heat, sparks, open flames, other sources of ignition, oxidizing conditions, high temperature with dehydrating conditions.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Strong oxidants.

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Strong oxidizing agents

ETHYLBENZENE

- Strong oxidizing agents.
- Strong acids.
- Strong alkalis.

10.6. Hazardous decomposition products

ETHYLBENZENE

May develop: methane,styrene,hydrogen,ethane.

- Incomplete combustion can cause the production of carbon monoxide, carbon dioxide and other toxic substances gas.
- Thermal decomposition can produce carbon monoxide and other toxic vapors.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

NEW PLASTIC**TOLUENE**

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

TOLUENE

LD50 (Oral) 5580 mg/kg Rat

LD50 (Dermal) 12124 mg/kg Rabbit

LC50 (Inhalation) 28,1 mg/l/4h Rat

ETHYLBENZENE

NEW PLASTIC

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 15354 mg/kg Rabbit

LC50 (Inhalation) 17,2 mg/l/4h Rat

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: standard acute oral test

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Oral

Results: LD50> 8 mL / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Inhalation (vapors)

Results: LC50> 23.3 mg / L air

Method: The acute toxicity of SBP 100/140 was determined according to Noakes and Sanderson (1969): A method for determining the dermal toxicity of pesticides, Br. J. Industr Med 26: 59-64.

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Dermal

Results: LD50> = 4 mL / kg bw

HYDROCARBONS C3-4

Method: Not indicated-Read Across

Reliability: 2

Species: Rat (Alderley Park (SPF); male / female)

Route of exposure: Inhalation

Results: LC50 1 443 mg / L air

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: OECD 401

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: LD50> 2000 mg / kg bw

Method: Sema. 1988. Manual of tests for assessing chemical agents toxicity, 1 ed. Brasilia: MHU.

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Dermal

Results: LD50> 3600 mg / kg bw

XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to EU Method B.1

Reliability: 1

Species: Rat (F344 / N; male / female)

Route of exposure: Oral

Results: LD50 = 3523 mg / kg bw

Method: Equivalent or similar to EU Method B.2

Reliability: 2

Species: Rat (male)

Route of exposure: Inhalation (vapors)

Results: LD50 = 6700 ppm

TOLUENE

NEW PLASTIC

Method: Equivalent or similar to EU Method B.1

Reliability: 2

Species: Rat (Sprague-Dawley Cobb; male)

Route of exposure: Oral

Results: LD50 = 5580 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapors)

Results: LC50 = 25.7 mg / L air

Method: Not indicated

Reliability: 2

Species: Rabbit

Route of exposure: Dermal

Results: LD50 > 5000 mg / kg bw

Bibliographic reference: Range-finding toxicity data: List VII, Smyth HF, Carpenter CP, Weil CS, Pozzani UC, Streigel JA and Nycum JS (1969)

SKIN CORROSION / IRRITATION

Causes skin irritation

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 404

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Category 2, Irritating

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: OECD 404

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not classified

ETHYLBENZENE

Method: Not indicated

Reliability: 2

Species: Rabbit

Route of exposure: Dermal

Results: Slightly irritating

Bibliographic reference: Smyth, Jr. H.F., Carpenter, C.P., Weil, C.S., Pozzani, U.C. and Striegel, J.A.,

Range finding toxicity data: List VI (1962)

TOLUENE

Method: EU Method B.4

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Irritating

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Federal Register of the F.D.A. 28 (110), 6.6.1963, para. 191.12. Test for eye irritants

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

NEW PLASTIC**BENZENE DERIVATIVES, MONO-C10-13-ALCHILE**

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not classified

ETHYLBENZENE

Method: Not indicated

Reliability: 2

Species: Rabbit

Route of exposure: Ocular

Results: Slightly irritating

Bibliographic reference: Wolf, M.A .; Rowe, V.K .; McCollister, D.D .; Hollingworth, R.L .; Oyen, F.,

Toxicological studies of certain alkylated benzenes. (1956)

TOLUENE

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Slightly irritating

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 406

Reliability: 2

Species: guinea pig (p-strain; male / female)

Route of exposure: Dermal

Results: Not sensitizing

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: OECD 406

Reliability: 1

Species: guinea pig (Hartley; female)

Route of exposure: Dermal

Results: Not classified

TOLUENE

Method: EU Method B.6

Reliability: 1

Species: guinea pig (Himalayan Albino; female)

Route of exposure: Dermal

Results: Not sensitizing

Respiratory sensitization

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES**GERM CELL MUTAGENICITY**

NEW PLASTIC

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 471

Reliability: 1

Species: *S. typhimurium*, *E. Coli*

Results: Negative with or without metabolic activation

Bibliographic reference: Brooks, T.M. et al., The genetic toxicology of some hydrocarbon and oxygenated solvents (1988)

HYDROCARBONS C3-4

Method: OECD 474-test in vivo

Reliability: 1

Species: Rat (Sprague-Dawley CD; male / female)

Route of exposure: Inhalation (gas)

Results: Negative

Method: OECD 471 in vitro test - Read Across

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: OECD 473 in vitro test

Reliability: 1

Species: Chinese hamster

Results: Negative with and without metabolic activation

XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to EU Method B.10-in vitro test

Reliability: 2

Species: Chinese hamster

Results: Negative with and without metabolic activation

Method: Equivalent or similar to OECD 478

Reliability: 2

Species: Mouse (Swiss Webster; male / female)

Route of exposure: Dermal

Results: Negative

ETHYLBENZENE

Method: EPA OPPTS 870.5300 - In vitro Mammalian Cell Gene Mutation Test in vitro test

Reliability: 1

Species: Lymphoma mouse

Results: Negative

Method: OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) - in vivo test

Reliability: 1

Species: Mouse (NMRI; male)

Route of exposure: Oral

Results: Negative

TOLUENE

Method: Equivalent or similar to EU Method B.13 / 14-in vitro test

Reliability: 2

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

Method: Not indicated - in vivo test

NEW PLASTIC

Reliability: 2
Species: Rat
Route of exposure: Intraperitoneal
Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS C3-4

Method: Equivalent or similar to EPA OPP 83-5 -Read Across
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Oral
Results: Carcinogen

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 416
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEL 9000 ppm

HYDROCARBONS C3-4

Method: OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley CD; male / female)
Route of exposure: Inhalation (gas)
Results: NOAEC (fertility) 10 000 ppm

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: OECD 422
Reliability: 1
Species: Rat (CrI: CD (SD); male / female)

NEW PLASTIC

Route of exposure: Oral
Results: Negative, NOAEL (fertility) = 1000 mg / kg bw / day

XYLENE (MIXTURE OF ISOMERS)

Method: Not indicated
Reliability: 2
Species: Rat (CrI-CD® (SC) BR; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC (fertility) = 500 ppm

ETHYLBENZENE

Method: Equivalent or similar to OECD Guideline 415
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation
Results: NOAEC 1 000 ppm

TOLUENE

Method: Not indicated
Reliability: 2
Species: Rat (Sprague_Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC (fertility) = 600 ppm
Bibliographic reference: Reproductive and developmental toxicity studies of toluene II. Effects of inhalation exposure on fertility in rats, Ono A, Sekita K, Ogawa Y, Hirose A, Suzuki S, Saito M, Naito K, Kaneko T, Furuya T, Kawashima K, Yasuhara K, Matsumoto K, Tanaka S, Inoue T and Kurokawa Y (1996)

Adverse effects on development of the offspring
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Food and Drug Administration 1966 "Guidelines for Reproduction Studies for Safety Evaluation of Drugs for Human Use", Segment II
Reliability: 2
Species: Rat (CD (SD))
Route of exposure: Inhalation (vapors)
Results: NOAEC 1 200 ppm

HYDROCARBONS C3-4

Method: EPA OPPTS 870.3700
Reliability: 1
Species: Rat (VAF / Plus®, Sprague-Dawley Derived (CD®) CrI: CD® IGS BR)
Route of exposure: Inhalation (gas)
Results: NOAEC (development) 10 426 ppm

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: Equivalent or similar to OECD 414
Reliability: 1
Species: Rat (Sprague-Dawley)
Route of exposure: Oral
Results: NOAEL (development) = 400 mg / kg bw / day

XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to OECD 414
Reliability: 2

NEW PLASTIC

Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)
Results: Negative (development)

ETHYLBENZENE

Method: OECD Guideline 414
Reliability: 1
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation
Results: NOAEC 500 ppm

TOLUENE

Method: Not indicated
Reliability: 2
Species: Rat (Wistar)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC (development) = 600 ppm
Bibliographic reference: Postnatal development and behavior of Wistar rats after prenatal toluene exposure, Thiel R and Chahoud I (1997)

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

HYDROCARBONS C3-4

Based on available data and through expert judgment, the substance is not classified as dangerous in the target organ toxicity class for single exposure.

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

XYLENE (MIXTURE OF ISOMERS)

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ETHYLBENZENE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

TOLUENE

Based on available data and through expert judgment, the substance is classified in the target prgani toxicity class for single exposure.

Target organ
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Central nervous system

ETHYLBENZENE

NEW PLASTIC

hearing organs

TOLUENE

Central nervous system

Route of exposure

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Inhalation

TOLUENE

Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Not indicated

Reliability: 2

Species: Rat (Wistar; male)

Route of exposure: Inhalation (vapors)

Results: NOAEC 12 470 mg / m³ air

Bibliographic reference: Takeuchi, Y. et al., A comparative study of the toxicity of n-pentane, n-hexane, and n-heptane to the peripheral nerve of the rat. (1981)

HYDROCARBONS C3-4

Method: OECD 413

Reliability: 1

Species: Rat (Sprague-Dawley CD; male / female)

Route of exposure: Inhalation (gas)

Results: NOAEC 10 000 ppm

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Method: Equivalent or similar to OECD 408

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: Negative, NOAEL = 1000 ppm

XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to OECD 408

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: Negative

ETHYLBENZENE

Method: OECD Guideline 407

Reliability: 1

Species: Rat (Wistar; male / female)

NEW PLASTIC

Route of exposure: Oral
Results: NOAEL 75 mg / kg bw / day
Method: Equivalent or similar to OECD Guideline 453
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC 250 ppm

TOLUENE

Method: Equivalent or similar to EU Method B.26
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Oral
Results: NOAEL = 625 mg / kg bw / day
Method: EU Method B.29
Reliability: 1
Species: Rat (F344 / N; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC = 625 ppm

Target organ
TOLUENE

Neurological

Route of exposure
TOLUENE

Inhalation

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

TOLUENE

LC50 - for Fish	5,5 mg/l/96h
EC50 - for Crustacea	3,78 mg/l/48h
EC50 - for Algae / Aquatic Plants	134 mg/l/72h
EC10 for Algae / Aquatic Plants	10 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	10 mg/l

XYLENE (MIXTURE OF ISOMERS)

LC50 - for Fish	2,6 mg/l/96h
EC50 - for Crustacea	1 mg/l/48h
EC50 - for Algae / Aquatic Plants	1,3 mg/l/72h
EC10 for Algae / Aquatic Plants	0,44 mg/l/72h

NEW PLASTIC

Chronic NOEC for Algae / Aquatic Plants	0,44 mg/l
BENZENE DERIVATIVES, MONO-C10-13-ALCHILE	
LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	> 1,4 mg/l/48h
Chronic NOEC for Crustacea	1,4 mg/l
Chronic NOEC for Algae / Aquatic Plants	> 2,08 mg/l
HYDROCARBONS C3-4	
LC50 - for Fish	49,47 mg/l/96h
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES	
LC50 - for Fish	13,4 mg/l/96h

12.2. Persistence and degradability**HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES**

Quickly degradable in water, 98% in 28 days.

HYDROCARBONS C3-4

Easily degradable in water.

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

Little degradable in water, 28% in 28 days.

XYLENE (MIXTURE OF ISOMERS)

Rapidly degradable in water, 98% in 28 days

ETHYLBENZENE

Rapidly biodegradable, 79% in 28 days.

TOLUENE

Easily degradable in water.

TOLUENE

Solubility in water 100 - 1000 mg/l

Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential**TOLUENE**

Partition coefficient: n-octanol/water 2,73

BCF 90

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water 3,12

NEW PLASTIC

BCF 25,9

ETHYLBENZENE

Partition coefficient: n-octanol/water 3,6

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2,73

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. 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 authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

The product is suitable for combustion in a closed controlled burner for the value or disposal of the fuel by supervised incineration at very high temperatures to prevent the formation of undesirable combustion products.

BENZENE DERIVATIVES, MONO-C10-13-ALCHILE

It can be incinerated if it complies with local regulations.

European Union waste code: EWC

A waste code compliant with the European Waste Catalog (EWC) cannot be assigned to this product as it only allows classification when the consumer uses it for some purpose. The waste code must be determined in agreement with the regional waste authority or company.

ETHYLBENZENE

- The product must not be allowed to enter drains, water courses or the soil.
- The contaminated product, soil or water can be hazardous waste due to a potentially low flash point.
- Comply with applicable local, state or international regulations regarding solid or hazardous waste disposal and / or disposal of containers.
- Make sure that the effluent complies with the applicable regulations.
- Solids in landfills in permitted sites.
- Use registered carriers.
- Burns concentrated liquids.
- Avoid the flames.
- Ensure that emissions comply with applicable regulations.
- Avoid overloading / poisoning the biomass of plants.
- Diluting aqueous waste can biodegrade.

SECTION 14. Transport information

NEW PLASTIC

14.1. UN number

ADR / RID, IMDG, 1950
IATA:

14.2. UN proper shipping name

ADR / RID: AEROSOLS
IMDG: AEROSOLS
IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1
IMDG: Class: 2 Label: 2.1
IATA: Class: 2 Label: 2.1



14.4. Packing group

ADR / RID, IMDG, -
IATA:

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
		Maximum quantity: 150 Kg	Packaging instructions: 203
IATA:	Cargo:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Pass.:	A145, A167, A802	
	Special Instructions:		

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

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/EC: P3a-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 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 the 98/24/EC directive is respected.

15.2. Chemical safety assessment

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

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3

NEW PLASTIC

Press. Gas (Liq.)	Liquefied gas
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may burst if heated.
H361d	Suspected of damaging the unborn child.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

NEW PLASTIC**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) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
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- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on 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 the 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.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.